

CITY OF FARMERS BRANCH

Water Quality Report 2019



Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono 972-919-2597

To Our Valued Water Customers:

The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. The report 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 system from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, contact Dallas Water Utilities at 214-670-5111.



Where Your Water Comes From

This report is produced to provide information about the Farmers Branch water system including source water, the levels of detected contaminants and compliance with drinking water rules. This report is also produced in order to answer your water quality questions. If you need more information, please call Dallas' Information Line at 214.670.5111.

Regular monthly tests are conducted on Farmers Branch water to ensure that it is clean and meets all water quality requirements. The City's water distribution system is an arrangement of taps, pump stations, storage facilities and a pipe network designed to supply the citizens and businesses with an adequate amount of potable water for consumption and fire protection. This arrangement of facilities is owned and operated by the City

of Farmers Branch and the water is treated by the City of Dallas.

The City of Farmers Branch purchases water through an agreement with the City of Dallas which uses surface water from seven sources: the Elm Fork of the Trinity River, Lake Ray Roberts, Lake Lewisville, Lake Grapevine, Lake Ray Hubbard, Lake Tawakoni and Lake Fork. In addition, Dallas has water rights in Lake Palestine to meet future needs.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily cause for health concerns. If you have concerns about taste, odor or color of drinking water, please contact the City of Farmers Branch at 972.919.2597.

What's In Your Water?

As water travels over the surface of the land or through the ground it may dissolve naturally occurring minerals and in some cases, radioactive material and can pick up substances resulting from the presence of animal or human activity.

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. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline 1.800.426.4791. In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration, which provides the same protection for public health, prescribes regulations which establish limits for contaminants in bottled water.

Unregulated Contaminants

Unregulated contaminants are those for which the 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 regulations are warranted.

Cryptosporidium

Cryptosporidium is a tiny intestinal parasite found naturally in the environment. It is spread by human and animal waste. If ingested, cryptosporidium may cause cryptosporidiosis, an intestinal infection, (symptoms include nausea, diarrhea, and abdominal cramps). Some of the ways cryptosporidium can be spread include drinking contaminated water, eating contaminated food that is raw or undercooked, exposure to the feces of animals or infected individuals (i.e. changing diapers without washing hands afterward), or exposure to contaminated surfaces. Not everyone exposed to the organism becomes ill.

During 2019, Dallas continued testing for cryptosporidium in untreated water. Dallas Water Utilities began monitoring for cryptosporidium in 1993. It has been found only in the untreated water supply. Cryptosporidium has not been found in Dallas treated drinking water. To protect your drinking water, Dallas works to protect the watershed from contamination and optimizes treatment processes. Although Dallas' water treatment process removes cryptosporidium, immunocompromised persons should consult their doctors regarding appropriate precautions to take to avoid infection. To request more information on cryptosporidium, please call the U.S. EPA's Safe Drinking Water Hotline (1-800- 426-4791) or visit water.epa.gov/drink/hotline/index.cfm.

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 home plumbing. The City of Farmers Branch 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 the possibility of lead in your water; you have the option of having your water tested by a private lab at your own expense. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure are available from the Safe Drinking Water Hotline at 1.800.426.4791 or at www.epa.gov/safewater/lead.

Water Loss Audit Results

In the water loss audit submitted to the Texas Water Development Board for the time period of January 1, 2019 through December 31, 2019, our system lost an estimated 14.14% of the system input volume. If you have questions about the water loss audit please call 972.919.2597

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 transplant; 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 infections by *Cryptosporidium* are available from the Safe Drinking Water hotline at (800) 426-4791.

To learn more about the City of Farmers Branch Utility Operations, please call 972.919.2597. For questions and concerns about water quality, call the EPA's Safe Drinking Water Hotline at 1.800.426.4791, or go to www.epa.gov. Additional copies of this report may be obtained at Farmers Branch City Hall, Farmers Branch Community Recreation Center, The Branch Connection, Manske Library and online at www.farmersbranchtx.gov. The City Council usually meets on the first and third Tuesday of each month. For more information about City Council meetings, call 972.919.2503. Meetings start at 6 pm and are held at City Hall at 13000 William Dodson Parkway.

2019 SAMPLE RESULTS

These charts show the regulated and unregulated contaminants detected in the water the City of Farmers Branch purchased from the City of Dallas Water Utilities in 2019.

2019 WATER QUALITY DATA REPORT DALLAS WATER UTILITIES

Contaminant	Year of Range	Level					Source Of Contaminants
		Average	Minimum	Maximum	MCL	MCLG	
Inorganic Contaminants							
Fluoride (ppm)	2019	0.361	0.170	0.472	4	4	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Bromate (ppb)	2019	5	< 1	13	10 ¹	0	By-product of drinking water disinfection.
Barium (ppm)	2019	0.029	0.012	0.040	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.

Radioactive Contaminants							
Gross beta particle activity pCi/L ²	2017	5.1	4.2	6.6	50	0	Decay of natural or man-made deposits.

Organic Contaminants							
Atrazine (ppb)	2019	0.1	<0.1	0.2	3	3	Runoff from herbicide used on row crops.

Total Organic Carbon	Year of Range	Level				Source Of Contaminants	
		Average	Minimum	Maximum	TT (no MCL) ³		
Total Organic Carbon (ppm)	2019	3.02	1.87	4.07	35% Removal / SUVA ≤ 2		Naturally present in the environment.

Disinfectant	Year of Range	Level					Source Of Contaminants
		Average	Minimum	Maximum	MRDL	MRDLG	
Total Chlorine Residual (ppm)	2019	2.63	2.36	2.96	4 ⁴	4 ⁴	In distribution system - Water additive used to control microbes.

Turbidity	Year of Range	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits		Turbidity Limits	Source Of Contaminants
Turbidity (NTU)	2019	0.36	99%		0.3 (TT)	Soil Runoff

UCMR 4: Unregulated Contaminants Monitoring Rule 4							
Contaminant	Year of Range	Level			MCL	MCLG	Source Of Contaminants
		Avg.	Min.	Max.			
HAA5 (ppb)	2019	6.01	3.22	12.66	60	N/A	By-product of drinking water disinfection
HAA6Br (ppb)	2019	5.50	3.36	8.59	N/A	N/A	
HAA9 (ppb)	2019	9.72	5.66	19.22	N/A	N/A	
Manganese (Total) (ppb)	2019	1.60	0.40	2.30	50	N/A	Naturally occurring element

2019 WATER QUALITY DATA REPORT CITY OF FARMERS BRANCH

2019 Unregulated Contaminants							
Contaminant / Unit of Measure	Year of Sampling	Maximum Contaminant Level Goal (MCLG)	Maximum Conataminant Level (MCL)	Amount in Farmers Branch Water			Source
				Avg.	Min.	Max.	
Chloroform (ppb)	2019	N/A	70	12.49	3.05	23	By-Product of drinking water disinfection
Bromoform (ppb)	2019	N/A	N/A	<1	<1	<1	
Dibromochloro-methane (ppb)	2019	60	N/A	3.72	3.02	4.59	
Bromodichloro-methane (ppb)	2019	N/A	0	7.29	3.82	9.57	

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. Any unregulated contaminants detected are reported in the table above. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

UCMR 4 Unregulated Contaminants Monitoring Rule 4							
Bromochloroacetic Acid (ug/L)	2019	N/A	N/A	2.51	1.26	3.27	By-Product of drinking water disinfection
Bromodichloroacetic Acid (ug/L)	2019	N/A	N/A	0.71	ND	1.05	
Chlorodibromoacetic Acid (ug/L)	2019	N/A	N/A	0.59	0.409	0.73	
Dibromoacetic Acid (ug/L)	2019	N/A	N/A	1.09	0.514	1.56	
Dichloroacetic Acid (ug/L)	2019	N/A	N/A	3.64	1.66	4.76	
Monobromoacetic Acid (ug/L)	2019	N/A	N/A	0.29	ND	0.441	
Trichloroacetic Acid (ug/L)	2019	N/A	N/A	0.78	ND	1.17	
Manganese (Total) (ppb)	2019	N/A	N/A	2.2	2.2	2.2	Naturally present in the environment

The UCMR program was developed in coordination with the Contaminant Candidate List (CCL). The CCL is a list of contaminants that are not regulated by the National Primary Drinking Water Regulations, are known or anticipated to occur at public water systems and may warrant regulation under the Safe Drinking Water Act. Data collected through UCMR are stored in the National Contaminant Occurrence Database (NCOD) to support analysis and review of contaminant occurrence, to guide the CCL selection process and to support the Administrator's determination of whether to regulate a contaminant in the interest of protecting public health.

2019 Disinfection and Disinfection By-Product						
		Highest Level	Range of Samples	MCLG	MCL	Source
Total Trihalomethanes (TTHM) (ppb)	2019	26 ⁵	9.93 - 36.4	No Goal	80	By-Product of drinking water disinfection.
Haloacetic Acids (HAA5) (ppb)	2019	18 ⁶	1.9 - 31	No Goal	60	

2019 Inorganic Contaminants						
		Highest Level	Range of Samples	MCLG	MCL	
Nitrate (as Nitrogen) (ppm)	2019	1	0.565 - 0.578	10	10	Runoff from fertilizer use.
Nitrite (as Nitrogen) (ppm)	2015	0.064	0 - 0.064	1	1	Runoff from fertilizer use.

2019 Lead and Copper						
		90th Percentile	Number of Sites Exceeding Action Level	MCL	MCLG	Source
Lead (ppb)	2019	1 ⁷	1	AL=15	0	Corrosion of Household Plumbing ⁷
Copper (ppm)	2019	0.209 ⁷	0	AL=1.3	1.3	

2019 Disinfectant							
		MRDLG	MRDL	Avg.	Min.	Max.	Source
Total Chlorine Residual (ppm)		4 ⁴	4 ⁴	1.84	0.5	3.7	Water Additive used to control microbes

2019 Total Coliform Bacteria						
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	5	0	0	N	Naturally present in the environment

TABLE FOOTNOTES

¹ The MCL for Bromate is the running annual average of monthly averages, computed quarterly (30TAC §290.114(b) (5)(C)).

² 50 pCi/L - 4 mrem/yr.

³ Treatment technique requires 35% removal or SUVA ≤2. The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements.

⁴ As annual Average.

⁵ The value in the highest level or average level detected is the highest average of all TTHM results collected at a location over a year.

⁶ The value in the highest level detected column is the highest average of all HAA5 sample results collected at a location over a year.

⁷ 90th percentile value in the distribution system.



Violations Table

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation:
Disinfectant Level Quarterly Operating Report (DLQOR)	4/1/19	6/30/19	We failed to test our drinking water for the contaminant and period indicated. The City is in compliance as all required work was, in fact, done, but the form did not get mailed. The Public Works Department has now implemented a redundant policy to ensure that all reporting forms are mailed in a timely manner. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Terms Used in This Report

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 are based on running annual average of monthly samples.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

MFL: Million fibers per liter (a measure of asbestos)

mrem: Millirems per year (a measure of radiation absorbed by the body)

Maximum Contaminant Level (MCL): The highest level of contaminant allowed in drinking water. MCL's are set as close to 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 risk to health. MCLG'S allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of 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 or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

N/A: Not applicable

Treatment Technique (TT): A required process intended to reduce the level of a contaminant which a water system must follow.

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

Nephelometric Turbidity Units (NTU): Measure of turbidity in water.

Turbidity: A measure of the clarity of drinking water. The lower the turbidity the better.

pCi/l: Pico-Curies per liter - a measure of radioactivity

ppm: Parts per million

ppb: Parts per billion

ppq: Parts per quadrillion, or picograms per liter (pg/L)

ug/L: Micrograms per liter

ND: Not Detected

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct one Level 1 assessment. One Level 1 assessment was completed. In addition, we were required to take 0 corrective actions and we completed 0 corrective actions.