

Trophy Club Municipal Utility District No. 1 Public Water System ID No. TX0610018 2019 Annual Drinking Water Quality Report

Consumer Confidence Report June 2020

***This information is provided to you by: Trophy Club Municipal Utility District No. 1
100 Municipal Drive, Trophy Club, Texas 76262, Phone: (682) 831-4600
District Contact: Alan Fourmentin, General Manager***

Special Population Advisory

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.

Water Sources:

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 before treatment include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, and 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 and 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.

Our Drinking Water Meets or Exceeds All

Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the following pages. We hope this information helps you become more knowledgeable about what is in your drinking water. Should you have questions or need additional copies of this report, please call the District office at (682) 831-4600. The report is also available on our website at www.tcmud.org.

Public Participation Opportunities

Date: June 15, 2020

Time: 6:30 p.m.

Location: Zoom/telephone conference

The public toll-free dial-in numbers to participate in the telephonic meeting are: 1 888 475 4499 and 1 877 853 5257; Meeting ID: 861 6449 3466

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (682) 831-4600 para hablar con una persona bilingüe en español.

Where Do We Get Our Drinking Water?

Our drinking water is obtained from both surface and groundwater sources. Surface water is purchased from the City of Fort Worth and its sources are Lake Worth, Eagle Mountain Lake, Lake Bridgeport, Richland Chambers Reservoir, Cedar Creek Reservoir, and the Clear Fork Trinity River (from Lake Benbrook). Groundwater sources are from four wells including three from the Paluxy Aquifer and one from the Trinity Aquifer. The Texas Commission on Environmental Quality (TCEQ) completed an assessment of your drinking water sources and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this report. For more information about your sources of water please refer to the Source Water Assessment Viewer available at <http://www.tceq.texas.gov/gis/swaview>. Further details about sources and source-water assessments are available on Texas Drinking Water Watch at <http://dww2.tceq.texas.gov/DWW/>. For more information on source water assessments and protection efforts at our system, contact Alan Fourmentin at (682) 831-4600.

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 water poses a health risk. In order to ensure tap water is safe to drink, the EPA and TCEQ prescribe regulations which limit 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

Water Quality Data

The table in this report lists all the drinking water contaminants we detected during tests conducted from the previous calendar year, unless otherwise noted. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Therefore, some of the data, though representative of the water quality, is more than one year old.

Secondary Constituents

Many constituents (such as calcium, sodium or iron) 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.

About the Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The United States Environmental Protection Agency (EPA) requires water systems to test up to 97 constituents. Please note that not all constituents are required to be sampled every year. Only the most recent year for sampling of a constituent is included in the report.

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.

Average (Avg): Regulatory compliance with some MCLs are based on running annual average of monthly samples.

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 technology.

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 (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.

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

Abbreviations

MFL - million fibers per liter (a measure of asbestos)

N/A - not applicable

NTU - Nephelometric Turbidity Units

ppq - parts per quadrillion, or picograms per liter

ppt - parts per trillion, or nanograms per liter

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)

mrem/yr – millirems per year

ND – (not-detectable) lab analysis indicates not present

UMHO/CM – micromhos

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2019	1.3	1.3	0.3508	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2019	0	15	2.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

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. Trophy Club Municipal Utility District No. 1 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>.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation (Y or N)	Source of Disinfectant
2019	Chloramine Residual (Total Chlorine)	2.91	1.0	3.90	4.0	<4.0	ppm	N	Disinfectant used to control microbes.

Disinfection By-Products

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCL	Unit of Measure	Violation (Y or N)	Source of Contaminant
2019	HAA5 Total Haloacetic Acids	11	7.2-12.7	60	ppb	N	Byproduct of drinking water disinfection.
2019	Total Trihalomethanes	19	9.08-31.6	80	ppb	N	Byproduct of drinking water disinfection.

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

*Highest level detected is based on a running annual average calculated from quarterly samples as required by TCEQ, and may be from predecessor system measurement

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2019	0.055	0.055 - 0.055	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	10/10/2017	73.2	73.2 - 73.2	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	10/10/2017	0.666	0.666 - 0.666	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Mercury	2019	2.26	2.26 - 2.26	2	2	ppb	N	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
Nitrate [measured as Nitrogen]	2019	0.257	0.257 - 0.257	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2019	4.8	4.8 - 4.8	0	50	pCi/L*	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Organic Contaminants – (Measured in Fort Worth system)

Year	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation (Y or N)	Source of Contaminant
2019	Atrazine	0.1	0 – 0.1	3	3	ppb	N	Herbicide

Microbial Contaminants NONE DETECTED

Year	Contaminant	MCL	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Violation (Y or N)	Source of Contaminant
2019	Total Coliform, including E. Coli	0	Absent	100%	N	Human and animal fecal waste.

Total Coliform Bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform are harder than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Radioactive Contaminants (Source Water: City of Fort Worth)

Year	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation (Y or N)	Source of Contaminant
2017	Combined Radium (-226 & -228)	2.5	NA	0	5	pCi/L	N	Erosion of natural deposits.

2017	Beta/photon emitters	5.6	4.4 - 5.6	0	50*	(mrem/year) / (pCi/L)	N	Decay of natural and man-made deposits.
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*EPA considers 50 pCi/L to be the level of concern for Beta particles

Inorganic Contaminants (Source Water: City of Fort Worth)

Year	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation (Y or N)	Source of Contaminant
2019	Arsenic	1.50	0 – 1.10	0	10	ppb	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
2019	Barium	.07	.05 - .07	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2019	Uranium	1.1	0 to 1.1	0	30	Ppb	N	Erosion of natural deposits
2019	Cyanide	126	74.8 to 126	200	200	ppb	N	Discharge plastic and fertilizer factories; discharge from steel/metal factories.
2019	Fluoride	.54	.15 - .54	4	4	ppm	N	Water additive which promotes strong teeth; Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2019	Bromate	4.35	0 – 14.8	10	0	ppm	N	By-product of drinking water disinfection

Inorganic Contaminants Cont. (Source Water: City of Fort Worth)

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Collection Date
2019	Nitrate * (measured as nitrogen)	.58	0.18 – 0.58	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2019	Nitrite**	.02	.01 - .02	1	1	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

**Measured in Fort Worth System

*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.

Turbidity (Source Water: City of Fort Worth)

Year	Contaminant	MCL	MCLG	Highest Single Measurement	Range of Levels Detected	Turbidity Limits	Unit of Measure	Violation (Y or N)	Source of Contaminant
2019	Turbidity – Highest Measurement	TT=1	NA	0.5	NA	0.3	NTU	N	Soil runoff.
2019	% of Samples ≤ 0.3 NTU	TT=99	NA	NA	NA	0.3	NTU	N	Soil Runoff

§290.275(3)(5) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Total Organic Carbon (Source Water: City of Fort Worth)

Year	Contaminant	MCL	MCLG	Highest Measurement	Lowest Measurement	Average	Violation (Y or N)	Source of Contaminant
2019	Total Organic Carbon	TT = % removal	N/A	1	1	1	N	Naturally occurring.

Total Organic Carbon is used to determine disinfection by-product precursors. The City of Fort Worth was compliant with all monitoring and treatment technique requirements for disinfection by-product precursors.

Year-Round Watering Restrictions in Effect

Consult the TCMUD.org website for further details. <http://tcmud.org/customer-service/water-restrictions/>

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.

Compound	Measure	MRDL	MRDLG	Average	Range of Detects	Common Sources of Substance
Chloral Hydrate	ppb	Not regulated	N/A	0.33	0.23 to 0.43	By-product of drinking water disinfection
Bromoform	ppb	Not regulated	0	1.07	1.02 to 4.09	By-products of drinking water disinfection; not regulated individually; included in Total Trihalomethanes
Bromodichloromethane	ppb	Not regulated	0	3.97	1.12 to 8.94	
Chloroform	ppb	Not regulated	70	3.68	1.32 to 8.11	
Dibromochloromethane	ppb	Not regulated	60	3.68	1.01 to 10.4	
Dibromoacetic Acid	ppb	Not regulated	N/A	1.41	1.00 to 3.20	By-products of drinking water disinfection; not regulated individually; included in Haloacetic Acids
Dichloroacetic Acid	ppb	Not regulated	0	4.78	2.40 to 9.20	
Monobromoacetic Acid	ppb	Not regulated	N/A	0.02	1.00 to 1.00	
Monochloroacetic Acid	ppb	Not regulated	70	0.61	1.00 to 2.50	
Trichloroacetic Acid	ppb	Not regulated	20	0.09	1.00 to 2.00	

(Source Water: City of Fort Worth)

Secondary Constituents

These items do not relate to public health but rather to the aesthetic effects. These items are often important to industry.

Compound	Measure	Your water
Bicarbonate	ppm	128 to 149
Calcium	ppm	42.4 to 60.7
Chloride	ppm	19.5 to 35.1
Conductivity	µmhos/cm	403 to 482
pH	units	8.1 to 8.4
Magnesium	ppm	4.64 to 8.30
Sodium	ppm	15.1 to 26.8
Sulfate	ppm	23.4 to 44.3
Total Alkalinity as CaCO	ppm	128 to 150
Total Dissolved Solids	ppm	192 to 266
Total Hardness as CaCO ₃	ppm	138 to 178
Total Hardness in Grains	grains/gallon	8 to 10

(Source Water: City of Fort Worth)

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.