Drinking Water Consumer Confidence Report



1 JANUARY 2021 – 31 DECEMBER 2021

Public Participation Opportunities

To learn about future public meetings concerning your drinking water or to request to schedule one, please call us.

Bioenvironmental Engineering

POC: Major Todd D. Brackett Location: Bldg. 1200 Room B032 Phone No.: 940-676-3080 Email: <u>Todd.D.Brackett.mil@mail.mil</u>

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono 940-676-3080.

Drinking Water Information

Water Sources

The sources of drinking 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 human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic chemicals, pesticides, herbicides, radioactive isotopes, and organic chemical contaminants.

It is possible that 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 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (1-800-426-4791). 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 byproducts 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 is better than 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 EPA required test and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

Special notice required language for all community public water supplies

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. 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 Bioenvironmental Engineering 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).

Required 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. 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/lead.

Where do we get our drinking water?

Our drinking water comes from the following surface water sources: Lake Kickapoo, Wichita Falls secondary terminal reservoir, and Lake Arrowhead. Sheppard AFB purchases water from the City of Wichita Falls and is therefore considered a consecutive water system. Wichita Falls provides most monitoring and treatment. Bioenvironmental Engineering monitors for

contaminants and hazards specific to our distribution system. For more information on source water assessments and protection efforts, please contact us.

Secondary Constituents

Many un-harmful constituents often found in drinking water (such as calcium, sodium, or iron) can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas and monitored by the EPA. These constituents, though not required to be reported in this document, may greatly affect the appearance and taste of your water.

About the following pages

The U.S. EPA requires water systems to test for up to 97 contaminants. The pages that follow list all the federally regulated or monitored contaminants which have been found in your drinking water.

TCEQ completed an assessment of your source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. Please contact Bioenvironmental Engineering at 676-3080 if you are interested to learn more about our efforts to ensure the safety of your drinking water.





l	Definitions and Abbreviations
Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
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.
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 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 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 contaminants.
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.
MFL	million fibers per liter (a measure of asbestos)
mrem/year	millirem per year (a measure of radiation absorbed by the body)
N/A	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppb	micrograms per liter or parts per billion
ppm	milligrams per liter (mg/L) or parts per million
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water
Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.



We monitor the following contaminants at points throughout the distribution system:

Regulated Contaminants

These compounds either occur naturally within the watersheds or are products of human activities. Also, you will notice that some of our data, though representative, are more than one year old. The State of Texas allows water systems to monitor for some contaminants less often than others because the concentrations of these contaminants do not change frequently. Some contaminants are not required be included in the report if they are over 5 years old.

Contaminants	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Likely Source of Contamination
Nitrate (measured as Nitrogen) ppm	2021	0.0569	0.0569 - 0.0569	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium ppm	2021	0.042	0.036 - 0.042	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium ppb	2020	1.4	1.1 - 1.4	100	100	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride ppm	2021	0.729	0.674 – 0.729	4	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Cyanide ppb	2021	100	31.2 - 100	200	200	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Aluminum ppm	2021	0.014	0.0065 - 0.014	0.2	0.2	No	Natural geology; Rock and Soil erosion

Radioactive Contaminants

Contaminants	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Likely Source of Contamination
Beta/photon emitters; pCi/L*	2021	9.5	9.5 – 9.5	0	50*	No	Decay of natural and man-made deposits

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

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

Contaminants	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Likely Source of Contamination
Total Organic Carbon ppm	2021	8.02	< 0.10 - 8.02	N/A	TT	No	Naturally present in the environment

Maximum Residual Disinfectant Level

Systems must complete and submit disinfection data on the Disinfection Level Quarterly Operating Report (DLQOR). On the CCR report, the system must provide disinfectant type, minimum, maximum, and average levels. Compliance with the MRDL is determined based on the average monthly disinfectant level.

Disinfectant Residual	Year	Annual Average	Minimum Sample Level	Maximum Sample Level	MRDL	MRDLG	Likely Source of Contamination
Chlorine ppm	2021	3.12	0.1	4.3	4.0	<4.0	Water additive used to control microbes

Disinfectant Byproducts

Contaminants	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Likely Source of Contamination
*Haloacetic Acids (HAA5) ppb	2021	18	6.3 - 24.2	No goal for the total	60	No	By-product of drinking water disinfection
**Total Trihalomethanes (TTHM) ppb	2021	26	16.2 - 39.4	No goal for the total	80	No	By-product of drinking water disinfection
Chlorite ppm	2021	0.64	0.0 - 0.64	0.8	1	No	By-product of drinking water disinfection

*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 **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

Turbidity

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 system and disinfectants.

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.

	Level Detected	evel Detected Limit (Treatment Technique)		Likely Source of Contamination
Highest single measurement	0.95 NTU	1.0 NTU	No	Soil runoff
Lowest monthly % meeting limit	96%	0.3 NTU	No	Soil runoff

Coliform Bacteria

Total Coliform bacteria are 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 bacteria are hardier than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

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



2021 Annual Drinking Water Quality Report PWS: TX2430007

Lead and Copper

Contaminants	Date	MCLG	Action Level (AL)	90 th Percentile	# Sites over AL	Violation	Likely Source of Contamination
Copper ppm	2021	1.3	1.3	0.14	1	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead ppb	2021	0	15	4.8	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

Lead and copper are regulated at the consumer's tap under the Lead and Copper Rule of 1991. This monitoring is conducted every 3 years.

Cryptosporidium

Cryptosporidium is a microscopic parasite that can be found in the digestive tracts of animals. It is shed in the feces and when ingested by humans may result in diarrhea, cramps, fever, and other gastrointestinal symptoms. People with healthy immune systems usually recover within a couple of weeks. However, individuals with weakened immune systems may be unable to clear the parasite from their intestines and suffer a chronic and debilitating illness known as cryptosporidiosis. (NOTE: The table below is providing you data on monitoring of the City of Wichita Falls and has undertaken to keep track of certain protozoans in its source waters. The city has tested its source water and drinking water for these parasites since 1994).

Contaminants	Date	Reportable value	Range of Detection	MCLG	MCL	Violation	Likely Source of Contamination
Giardia; cysts	2020	0	0-0	0	Not regulated	No	Not naturally present in the environment
Cryptosporidium; oocysts	2020	0	0-0	0	Not regulated	No	Not naturally present in the environment

Water Conservation Tips

Keep a pitcher of cold water in the refrigerator, rather than letting the faucet run until the water is cool.

Hand-washing dishes takes more time than using a dishwasher. Let your dishwasher do the work and you will save almost 10 days a year! You will also save money and water! If washing dishes by hand, use a basin of soapy water or plug the sink. Use the dishwasher efficiently. Only run it when you have a full load. Scrape dirty dishes and cookware, rather than rinsing them. Use the "light wash" feature when possible.

Showering accounts for nearly 17% of indoor water use. Reduce this by taking shorter showers. Get a shower timer for your kids and make it into a game.

Turn off the tap when shaving or brushing your teeth and save up to 2,400 gallons of water a year. This is an easy one for both kids and adults to try.

Washing only full loads of laundry can save an average household more than 3,400 gallons of water each year. As a bonus, you can also save energy by using cold water when possible.

Sweep driveways and sidewalks, as opposed to hosing them off.

If you have a pool, use a cover to reduce evaporation.

Wash your car with water from a bucket or use a commercial car wash that recycles water.

Water is a natural resource not to be wasted.





We would like to thank the students and staff at Sheppard Elementary School for providing drawings for water conservation.

