

2020 Annual Drinking Water Quality Report
(Consumer Confidence Report)
CITY OF SCHERTZ
Water System # TX0940003
210-619-1800

Special Notice: *Required language for ALL community public water supplies*

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.

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 attached pages. We hope this information helps you become more knowledgeable about what is in your drinking water.

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 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 system's business office.

En Espanol:

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar at tel. (210) 619-1800- para hablar con una persona bilingue en espanol.

Public Participation Opportunities:

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

Date: Monday – Friday

Time: 8:00 am to 5:00 pm

Location: 10 Commercial Place, Bldg 2

Phone Number: 210-619-1800

Where do we get our drinking water?

Our drinking water is obtained from two ground water sources: The Schertz Seguin Well Field water comes from the CARRIZO-WILCOX Aquifer and the Naco Well 1 & 2 water comes from the EDWARDS Aquifer. The Naco Wells are only used when water supply from the Schertz Seguin Well is limited. TCEQ completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for your water system are based in this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Schertz Public Works 210-619-1800.

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 cause for health concern. Therefore, secondaries 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 U.S. EPA requires water systems to test for up to 97 contaminants.

Definitions:

Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Average (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 has 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 has been found in our water system on multiple occasions.

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 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)

Mrem - millirems per year (a measure of radiation absorbed by the body)

na - not applicable

NTU - Nephelometric Turbidity Units

pCi/l - picocuries per liter (a measure of radioactivity)

ppb - parts per billion, or micrograms per liter

ppm - parts per million, or milligrams per liter (mg/L)

ppq - parts per quadrillion, or picograms per liter (pg/L)

ppt - parts per trillion, or nanograms per liter (ng/L)

Inorganic Contaminants

Collection Date	Contaminant	Violation	Level Found	MCL	MCLG	Unit of Measure	Source of Contaminant
2020	Barium	No	0.0891	2	2	ppm	Discharge of drilling wasters; discharge from metal refineries; erosion of natural deposits.
2020	Fluoride	No	0.12	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2020	Nitrate	No	1.0	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
2020	Selenium	No	4.1	50	50	ppb	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
2017	Beta/photon Emitters	No	6.7	50	0	pCi/L	Decay of natural and man-made deposits

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

Organic Contaminants

Collection Date	Contaminant	Violation	Level Found	MCL	MCLG	Unit of Measure	Source of Contaminant
2020	Xylenes	No	0.0031	10	10	ppm	Discharge from petroleum factories; Discharge from chemical factories.

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.

Year Tested	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2020	Chlorine	1.81	1.19	2.2	4.0	4.0	ppm	Disinfectant used to control microbes.

Violations**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).	07/01/2019	09/30/2019	Did not submit Disinfectant Level Quarterly Operating Report for the period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Due to insufficient reporting in 2019 CCR we have attached the required mandatory reporting violation page at the end of 2020 CCR for reference.

Disinfection Byproducts

Year	Contaminant	Highest Level	Range of Levels	MCLG	MCL	Unit of Measure	Source of Tested Contaminant
2020	Haloacetic Acids (HAA5)	2.0	0 – 1.4	No goal	60	ppb	Byproduct of drinking water disinfection
2020	Total Trihalomethanes (TTHM)	12.0	0 – 8.9	No goal	80	ppb	Byproduct of drinking water disinfection

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

In the Consumer Confidence Report (CCR), the highest level detected column for TTHM and HAA5 refers to the highest locational running annual average (LRAA) compliance value detected for that year; the LRAA compliance value can include results from the previous year as part of its calculation. The range of individual samples column is specific to results that were detected during the calendar year for the CCR.

To be protective of health from long-term exposure, the EPA has established that compliance with the maximum contaminant level (MCL) for total trihalomethanes (TTHM) and haloacetic acids (HAA5) be calculated at each sample location using a running annual average of four consecutive quarters rather than being based on individual sample results. For example, the LRAA for second quarter 2020 (2Q2020) would use data from third quarter (3Q2019) to (2Q2020) divided by the four consecutive quarters.

This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acids in the system for future regulations. The samples are not used for compliance, and have been collected under non-standard conditions. EPA requires the data to be reported here. Please contact your water representative if you have any questions.

Coliform Bacteria

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 bacteria are more hardy than many disease causing organism; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

*5% of monthly samples are positive-no more than 2 positive samples allowed

**Fecal Coliform or E.Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal Coliform or E. Coli positive

Year	Contaminant	Highest Monthly # of Positive Samples	Total Coliform MCL	MCLG	Total # of E.Coli or Fecal Coliform Samples	Unit of Measure	Violation	Source of Contaminant
2020	Total Coliform	1.9	*	0	0	Presence	N	Naturally present in the environment
2020	Fecal Coliform	0	**	0	0	Presence	N	Naturally present in the environment

Fecal coliform bacteria and, in particular, E. coli, are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a health risk for infants, young children, some elderly, and people with severely compromised immune systems.

Turbidity **NOT REQUIRED**

Unregulated Contaminant Monitoring Rule 2 (UCMR2)

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 following table. For additional information and data visit: <http://www.epa.gov/safewater/ucmr/ucmr2/index.html>, or call the Safe Drinking Water Hotline at (800) 426-4791.

Lead and Copper

Year Tested	Contaminant	The 90 th Percentile	# of Sites Exceeding Action Level	Violation	MCLG	Action Level	Unit of Measure	Source of Contaminant
2019	Lead	0	0	No	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2019	Copper	0.12	0	No	1.3	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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. This water supply 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>.”

Carrizo-Wilcox Aquifer Water Data- Taken from Schertz Seguin Local Government Corporation Records (#TX0940094)**Secondary and Other Constituents Not Regulated** (No associated adverse health effects)

Year Tested	Constituent	Violation	Highest Level Found	Unit of Measure	MCL (mg/L)	Source of Constituent
2019	Bicarbonate	No	129	mg/L	N/A	Corrosion of carbonate rock such as limestone
2019	Calcium	No	35.2	mg/L	N/A	Abundant naturally occurring element
2019	Chloride	No	31	mg/L	300	Abundant naturally occurring element, used in water purification; byproduct of oil field activity
2019	Hardness as CaCO ₃	No	108	mg/L	N/A	Naturally occurring calcium and
2019	Magnesium	No	4.88	mg/L	N/A	Abundant naturally occurring element
2019	Manganese	No	0.0011	mg/L	0.05	Abundant naturally occurring element
2019	Nickel	No	0.001	mg/L	0.1	Erosion on natural deposits
2019	Sodium	No	31	mg/L	N/A	Erosion of natural deposits; byproduct of oil field activity
2019	Sulfate	No	36	mg/L	300	Naturally occurring; common industrial byproduct; byproduct of oil field activity
2019	Total Alkalinity As CaCO ₃	No	106	mg/L	N/A	Naturally occurring soluble mineral
2019	Zinc	No	0.0087	mg/L	5.0	Moderately abundant naturally occurring element used in metal industry
2020	pH	No	8.27	units	>7.0	Measure of corrosivity of water

In the water loss audits submitted to the Texas Water Development Board for the time period of Jan-Dec 2020, our system lost an estimated 58.6 mg of water (2.61%). If you have any questions about the water loss audit please call PWS phone number.