ANNUAL DRINKING WATER REPORT FOR 2019

Texas A&M University

(979-862-4606)

The Texas Commission on Environmental Quality (TCEQ) monitors all public water systems within this state. The TCEQ has assessed our system and has determined that our water is safe to drink. The system maintains a "Superior Water System" rating from the TCEQ. As part of their ongoing monitoring of public water systems the TCEQ has requested us to provide you the following report. The Annual Drinking Water Report for 2019 is designed to inform you about the quality water we deliver for your use. This report is for the Texas A&M University Main Campus system (TCEQ PWS No. 0210017). Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the superior quality of your drinking water.

Texas A&M University pumps water from wells located on and north of the RELLIS Campus. Texas A&M owns and produces water from seven wells. Four of these wells produce water from low volume, shallow aquifers (Sparta and Carrizo) and the other three produce from deep, high volume aquifers (Carrizo-Wilcox Simsboro Sand). Water from our deep wells is pumped through cooling towers to reduce their initial temperature from 130ºF to 90ºF. This makes a more desirable water temperature for use and improves our disinfection processes. Disinfection is the injection of sodium hypochlorite or chlorine into the water and assures potability. RELLIS Campus has its own disinfection and distribution system. Excess water from RELLIS Campus is blended with the water from the Wellfield. This water is then pumped 7.5 miles through a dual pipeline system to our main storage tanks at the corner of F&B and Finfeather Roads. From this facility we deliver water to both the main campus and west campus. Our elevated water storage tank holds in excess of 2 million gallons of water that is used to maintain water pressure throughout the campus and provides reserves for things like firefighting. We maintain three interconnections with the City of College Station. This improves our reliability to deliver water to you in the event we have a major line or equipment failure.

The TCEQ is currently updating a Source Water Susceptibility Assessment for the drinking water sources in this report. This assessment describes the susceptibility and types of constituents that may come in contact with your drinking water sources based on both human and natural conditions. This assessment allows us to focus our water protection activities. Information on source water assessments is available from the Texas Water Watch at http://dww2.tceq.texas.gov/DWW/. Additional source water information is available at http://www.tceq.texas.gov/gis/swaview.

This report shows our water quality and what it means.

Texas A&M University routinely monitors for constituents in your drinking water according to Federal and State laws. This report is for the 2019 calendar year; however, we will be reporting data that was collected as far back as 2015. The requirements for producing this report require us to utilize data that is no older than five years and collected and analyzed under TCEQ direction. TCEQ is the state regulating-agency charged with maintaining water quality. The data we will present here is the most recent that meets these requirements. In all, over 4000 state-directed tests have been performed on your drinking water during the past 5 years. These include tests for nearly 100 constituents required by the USEPA. Separate testing is performed specifically for lead and

copper every three years. We conduct quarterly sampling to check for trihalomethanes (by-products of disinfection). At least seventy times a month we sample for the coliform group of micro-organisms that may be present in the water. Your water is continually being monitored. You will only see constituents listed in the following tables that have been detected in these samples.

DEFINITIONS.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/L) - One part per million corresponds to one minute in two years or a single penny in $10,000.
Parts per billion (ppb) or Micrograms per liter (µg/L) - One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
pCi/L –picocuries per liter (a measure of radioactivity)
Action Level (AL)- The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Maximum Contaminant Level - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs (see next definition) as feasible using the best available treatment technology.
Maximum Contaminant Level Goal - The "Goal" (MCLG) is 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.

> ***"MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect."***

Maximum Residual Disinfection Level (MRDL) – The highest level of disinfection allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum Residual Disinfection Level Goal (MRDLG) – The level of drinking water disinfection 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.
Coliforms - Total coliform bacteria are used as an indicator 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 organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.
na – not applicable

TABLES
The following tables list all the federally regulated or monitored contaminants or constituents which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 potential water contaminants or constituents.

Total Coliform:

Year	Contaminant	MCL (% of Monthly Samples)	Highest # of Monthly Coliform Samples	Number of Fecal or E.coli Samples	Sources
2019	Total Coliform Bacteria	1.4	1	0	Naturally present in the environment

Lead and Copper

Year	Contaminant	90th percentile	Sites exceeding Action Level	Action Level	Units of measure	Possible Sources of Contamination
2017	Lead	1.3	0	15	ppb	Corrosion of plumbing systems; erosion of natural deposits
2017	Copper	0.206	0	1.3	ppm	Corrosion of 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. 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."

Inorganic Contaminants/Disinfection and Disinfection By-Products/Radioactive:

Year	Disinfectant or Contaminant	Minimum Level	Maximum Level	MCL	MCLG	Units of measure	Possible Sources of Contaminant
2019	Fluoride	0.42	0.42	4	4	ppm	Erosion of natural deposits; water additives which promote strong teeth; discharge from fertilizer and aluminum factories
2019	Nitrate	0.12	0.14	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2019	Barium	0.0611	0.0667	2	2	ppm	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
2019	Haloacetic Acids	1.4	9.8	60	na	ppb	Byproduct of drinking water disinfection
2019	Total Trihalomethanes	5.4	61.8	80	na	ppb	Byproduct of drinking water disinfection

Nitrate Advisory—Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 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.

Maximum Residual Disinfection Level

Year	Disinfectant	Average level	Minimum level	Maximum level	MRDL	MRDLG	Unit of measure	Sources
2019	Chlorine & Sodium hypochlorite	1.84	0.47	4.40	4	2	ppm	Disinfectant used to control microbes.

Secondary and other constituents not regulated

Year or Range	Constituent	Average level	Minimum level	Maximum level	Secondary limit	Units of measure	Possible Source of Constituent
2019	**Bicarbonate**	**412**	**412**	**412**	**na**	ppm	**Corrosion of carbonate rocks such as limestone**
2019	**Chloride**	**82**	**82**	**82**	**250**	ppm	**Abundant naturally occurring element; used in water purification; byproduct of oil field activity**
2019	**pH**	**8.6**	**8.6**	**8.6**	**>7**	**units**	**Measure of corrosivity of water**
2019	**Sulfate**	**21**	**21**	**21**	**300**	ppm	**Naturally occurring; common industrial byproduct; byproduct of oil field activity**
2019	**Total Alkalinity**	**349**	**349**	**349**	**na**	ppm	**Naturally occurring soluble mineral salts**
2019	**Total Dissolved Solids**	**568**	**568**	**568**	**1000**	ppm	**Total dissolved mineral constituents in water**
2017	**Hardness**	**6.82**	**6.82**	**6.82**	**na**	ppm	**Naturally occurring calcium and magnesium**
2017	**Sodium**	**213**	**213**	**213**	**na**	ppm	**Erosion of natural deposits; byproduct of oilfield activity.**
2017	**Manganese**	**0.0050**	**0.0050**	**0.0050**	**0.05**	ppm	**Abundant naturally occurring element.**
2017	**Calcium**	**2.73**	**2.73**	**2.73**	**na**	ppm	**Abundant naturally occurring element.**

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, PEOPLE WITH HIV/AIDS OR OTHER IMMUNE PROBLEMS

"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."

Thank you for allowing us to continue providing you with clean, quality water this year. Please call our office if you have questions. We are at work around the clock to provide top quality water to every tap. If you have any questions about this report or the water you are using, please contact us at Utilities & Energy Services (979-862-4606) or by email to nathan.jones@tamu.edu.

Other numbers to call if you would like additional information on drinking water.

Brazos County Health Department	1-979-361-4450
TCEQ	1-512-239-1000
EPA Safe Drinking Water Hotline	1-800-426-4791