**2021 Annual Drinking Water Quality Report** (Consumer Confidence Report)

**TEXAS STATE UNIVERSITY - SAN MARCOS PWS# 1050003**

Phone No: 512-245-8629

Annual Water Quality Report for the period of January 1 to December 31, 2021

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact:

Name: Carl Teague

Phone: 512-245-8629

**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's in your drinking water.

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: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

***En Español***

Este reporte incluye información importante sobre

el agua para tomar. Para asistencia en espanol favor de llamar al telefono(512) 245- 3848 - para hablar con una persona bilingüe en español.

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

The 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 on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confident Report. For more information on source water assessments and protection efforts at our system, contact Carl Teague

**Public Participation**

**Opportunities**

**Date: None Scheduled**

**Time: Location:**

**Phone No: 512-245-1985**

**Where do we get our drinking water?** Our drinking water is obtained from GROUND water sources. It comes from the following Lake/River/Reservoir/**Aquifer**: **EDWARDS SOUTH BFZ**. A Source Water Susceptibility Assessment for your drinking water sources(s) is currently being updated by the Texas

Commission on Environmental Quality and will be provided to us this year. The report will describe the susceptibility and types of constituents that

may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

***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. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline (1-800-

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| --- |
| **ABBREVIATIONS** |
|  |
| **NTU -** Nephelometric Turbidity Units |
| **MFL -** million fibers per liter (a measure of  asbestos) |
| **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(μg/L) |
| **ppt -** parts per trillion, or nanograms per liter |
| **ppq -**parts per quadrillion, or picograms per liter |

426-4791).

**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 concern. Therefore, secondary’s 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**

**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.

**Action Level (AL)**

The concentration of a contaminant which, if

exceeded, triggers treatment or other requirements which a water system must follow.

**Organic Contaminants** NOT TESTED OR REPORTED, OR NONE DETECTED

**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 | Disinfectant | Average  Level | Minimum  Level | Maximum  Level | MCL | MCLG | Unit of  Measure | Source of Disinfectant |
| 2021 | Chlorine  Residual, Free | .85 | .6 | 1.2 | 4 | 4 | ppm | Disinfectant used to control  microbes. |

**Unregulated Initial Distribution System Evaluation for Disinfection Byproducts** WAIVED OR NOT YET SAMPLED

**Unregulated Contaminants** NOT REPORTED OR NONE DETECTED

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Unregulated Contaminate 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,](http://www.epa.gov/safewater/ucmr/ucmr2/index.html) or call  the Safe Drinking Water Hotline at (800)426-4791 | | | | | | |
| Year  (Range) | Contaminants | Average  Level | Minimum  Level | Maximum Level | Unit of  Measure | Source of Contaminant |
| 2009 | 1,3-dinitrobenzene | < 0.8 | 0 | 0 | ppb | Unknown |
| 2009 | RDX | <1.0 | 0 | 0 | ppb | Unknown |
| 2009 | TNT | < 0.8 | 0 | 0 | ppb | Unknown |
| 2009 | 245-HBB | <0.7 | 0 | 0 | ppb | Unknown |
| 2009 | BDE-100 | <0.5 | 0 | 0 | ppb | Unknown |
| 2009 | BDE-153 | <0.8 | 0 | 0 | ppb | Unknown |
| 2009 | BDE-47 | <0.3 | 0 | 0 | ppb | Unknown |
| 2009 | BDE-99 | <0.9 | 0 | 0 | ppb | Unknown |
| 2009 | dimethoate | <0.7 | 0 | 0 | ppb | Unknown |
| 2009 | terbufos sulfone | <0.4 | 0 | 0 | ppb | Unknown |

**Lead and Copper**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Contaminant | MCGL | Action Level | 90th Percentile | # sites Over All | Unit of  Measure | Violation | Source of Disinfectant |
| 2021 | Copper | 1.3 | 1.3 | .899 | 2 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems |
| 2021 | Lead | 0 | 15 | 1.1 | 0 | ppb | N | Corrosion of household plumbing systems; Erosion of natural deposits |

**Recommended 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 at* [*http://www.epa.gov/safewater/lead*](http://www.epa.gov/safewater/lead)*.”*

**Turbidity** NOT REQUIRED

**Regulated Contaminants**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 | 5% of Monthly Samples are Positive | 1.9 |  | 0 | N | Naturally Present in the environment |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Contaminants, Disinfectants and Disinfection By-Products** | **Collection Date** | **Highest Level Detected** | | **Range of Level Detected** | | **Maximum**  **Contaminant**  **Level Goal** | | **Maximum Contaminate Goal** | **Units** | **Violation** | **Likely Source**  **Of**  **Contamination** |
| E. Coli Positive | Monthly 2018 | 0 | |  | | 0 | | 0 |  | N | Naturally Present in the environment |
| Total Trihalomethanes  (TTHM) | 2021 | 13 | | 2.2-13.6 | | No goal for the total | | 80 | ppb | N | By-product of drinking water disinfection |
| Haloacetic Acid  (HAA5) | 2021 | 2 | | 0-2.0 | | No goal for the total | | 60 | ppb | N | By-product of drinking water disinfection |
| **Inorganic Contaminants** | **Collection Date** | **Highest Level Detected** | | **Range of Level Detected** | | **Maximum**  **Contaminant**  **Level Goal** | | **Maximum Contaminate Level** | **Units** | **Violation** | **Likely Source**  **Of**  **Contamination** |
| Barium | 2019 | 0 .0422 | | 0.0422-0.0422 | | 2 | | 2 | ppm | N | Discharge of drilling waste; Discharge from metal refineries: Erosion from natural deposits |
| Fluoride | 2020 | .19 | | .19 - .19 | | 4 | | 4.0 | ppm | N | Erosion from natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate [measured as Nitrogen] | 2021 | 2 | | 1.9-1.9 | | 10 | | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion from natural deposits. |
| **Radioactive Contaminants** | **Collection Date** | **Highest Level Detected** | | **Range of Level Detected** | | **Maximum**  **Contaminant**  **Level Goal** | | **Maximum Contaminate Level** | **Units** | **Violation** | **Likely Source**  **Of**  **Contamination** |
| Gross Alpha Compliance | 5-10-2011  7-18-2017 | 4 | | < 3 - 4 | | 0 | | 15 | pCi/L | N | Erosion from natural deposits. |
| **Violations Table** | | | | | | | | | | | | |
| The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials. | | | | | | | | | | | | |
| **Violation Type** | | | **Violation Begin** | | **Violation End** | | **Violation Explanation** | | | | | |
| LEAD CONSUMER NOTICE (LCR) | | | 09/29/2016 | | 10/31/2016 | | We failed to provide the results of lead tap water monitoring to the consumers at the locations water was tested. These were supposed to be provided no later than 30 days after learning the results.  Customer’s notified violation cleared. | | | | | |
| OCCT/SOWT recommendations / Study (LCR) | | | 03/31/2015 | | 2016 | | We failed to propose treatment to our regulator in response to results that indicate our water needs treatment to reduce lead and / or copper levels | | | | | |
| OCCT/SOWT recommendations / Study (LCR) | | | 04/01/2015 | | 2016 | | We failed to propose treatment to our regulator in response to results that indicate our water needs treatment to reduce lead and / or copper levels | | | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Revised Total Coliform Rule (RTCR)** | | | | | | The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, | | | | | | **Violation Type** | **Violation Begin** | | **Violation End** | **Violation Explanation** | | MONITORING, ROUTINE, MINOR (RTCR) | 01/01/2018 | | 01/31/2018 | We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. | |  |  |  |  |  | |  |  |  |  |  |   **Public Notification Rule** | | | | | | | | | | | | |
| The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency). | | | | | | | | | | | | |
| **Violation Type** | | | **Violation Begin** | | **Violation End** | | **Violation Explanation** | | | | | |
| Public Notice Rule Linked to Violation | | | 08/10/2012 | | 4/16/2016 | | We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. | | | | | |
| Public Notice Rule Linked to Violation | | | 03/31/2015 | | 05/03/2016 | | We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. | | | | | |
| Public Notice Rule Linked to Violation | | | 04/01/2015 | | 05/03/2016 | | We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. | | | | | |
| Public Notice Rule Linked to Violation | | | 06/07/2010 | | 2016 | | We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations. | | | | | |
| MONITORING, ROUTINE, MINOR (RTCR) | | | 12/1/2017 | | 12/31/2017 | | We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. | | | | | |

**Secondary and Other Not Regulated Constituents**

(No associated adverse health effects)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year or Constituent Average Minimum Maximum Secondary Unit of Source of Constituent  Range Level Level Level Limit Measure | | | | | | | |
| 2011-2020 | Bicarbonate | 317.5 | 267 | 368 | NA | ppm | Corrosion of carbonate rocks such as limestone. |
| 2011-2021 | Calcium | 94.1 | 85.2 | 103 | NA | ppm | Abundant naturally occurring element. |
| 2011-2021 | Chloride | 23.5 | 21 | 26 | 300 | ppm | Abundant naturally occurring element; used in  water purification; byproduct of oil field activity |
| 2011-2017 | Copper | .0035 | <0.002 | 0.005 | NA | ppm | Corrosion of household plumbing systems;  erosion of natural deposits; leaching from wood preservatives. |
| 2011-2019 | Magnesium | 17.1 | 15.6 | 18.6 | NA | ppm | Abundant naturally occurring element |
| 2011-2019 | Nickel | .0022 | 0.002 | 0.0024 | NA | ppm | Erosion of natural deposits |
| 2011-2021 | pH | 7.35 | 7.1 | 7.6 | >7.0 | units | Measure of corrosively of water |
| 2011-2021 | Sodium | 16.6 | 12.7 | 20.5 | NA | ppm | Erosion of natural deposits; byproduct of oil field  activity |
| 2011-2021 | Sulfate | 29.5 | 26 | 33 | 300 | ppm | Naturally occurring; common industrial  byproduct; byproduct of oil field activity |
| 2002-2021 | Total  Alkalinity as  CaCO3 | 281 | 260 | 302 | NA | ppm | Naturally occurring soluble mineral salts. |
| 2011-2021 | Total  Dissolved  Solids | 358 | 304 | 412 | 1000 | ppm | Total dissolved mineral constituents in water |
| 2005-2021 | Total  Hardness as  CaCO3 | 306.5 | 282 | 331 | NA | ppm | Naturally occurring calcium |
| 2002-2019 | Zinc | 0.0046 | 0.004 | 0.0052 | 5 | ppm | Moderately abundant naturally occurring element  used in the metal industry |

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