# ANNUAL WATER QUALITY REPORT

Reporting Year 2021



Presented By Mauriceville Municipal Utility District

PWS ID#: TX1810144

# **Our Mission Continues**

We are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2021. We are committed to providing safe, high-quality water services to our community while maintaining a standard of excellence in customer service and environmental conservation. We are always available should you have any questions or concerns.

## **Important Health Information**

The following information is required by the Texas Commission on Environmental Quality (TCEQ) to be published by all Texas water and sewer utilities to inform customers about potential problems that may occur in their systems.

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).

#### Lead in Home Plumbing

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 two 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.

# **Backflow Prevention**

Backflow preventers are a state requirement on all outside water spigots. These preventers keep contaminated water from backflowing into consumers' lines and ultimately into the district water distribution system. Anytime a water hose is left in an animal enclosure or mud puddle and the spigot does not have a backflow preventer, there is a dangerous risk of contaminated water being pulled into the system. If you are unsure if you have preventers on your outside spigots, please call or come by the office for more information.

# **TX811**

The district became a member of TX811 in May 2021. It receives notices from anyone that calls 811 before they begin to dig. By using TX811, it is no longer necessary to call the office to request a locate. Call before you dig!

# **Auto Draft**

MUD has two auto draft options. Please call the office for more information.

- Auto debit through direct drafting on a checking account. This option does not charge a fee.
- Auto payment setup through our online payment system. This option charges a fee.

# **Community Participation**

Board meetings are normally held every other month on the third Tuesday beginning at 6:00 p.m. at our office at 15509 FM 1442, Orange. Please check our website, www.mauricevillemud.com, for updated dates and times.

Whenever there is a message or emergency involving the district system, we send out alerts directly to your cell phone or email. We would like to encourage our customers to sign up for alerts at www.mauricevillemud.com.

# Where Does My Water Come From?

Mauriceville Municipal Utility District (MMUD) has five well sites that all pull from the Gulf Coast Aquifer, which is a major aquifer paralleling the Gulf of Mexico coastline from the Louisiana border to the border of Mexico. It consists of several aquifers, including the Jasper, Evangeline, and Chicot Aquifers, which are composed of discontinuous sand, silt, clay, and gravel beds. The maximum total sand thickness of the Gulf Coast Aquifer ranges from 700 feet in the south to 1,300 feet in the north. Freshwater saturated thickness averages about 1,000 feet.

Information provided by the Texas Water Development Board: http://www.twdb.texas.gov/groundwater/aquifer/majors/gulf-coast.asp.

QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Brad Haeggquist, Christy Davis, or Jeremy Walton at (409) 745-4882.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (409) 745-4882.

# Information About Your Drinking Water

The following information is required by the Texas Commission of Environmental Equality (TCEQ) to be published by all Texas Water and Sewer Utilities to inform customers about potential problems that may occur in their systems. 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 EPAs 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, U.S. 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.

# Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 45,865,144 gallons of water. If you have any questions about the water loss audit, please call (409) 745-4882.

MMUD staff has worked tirelessly to improve our water loss numbers. In 2018 our water loss was 23 percent, and in 2021 it dropped to 10 percent. This is due in large part to the district staff but also to our customers' diligence in quickly recognizing and calling in area leaks in our system. We appreciate your support in helping maintain this downward trend for water loss. (L-R) Russell Love, Board Director, Ted Williams, Board Treasurer, Tim McCarver, Board President, Jay Scheiderer, Board Director, Mike West, Board Vice President.



### Mauriceville Municipal Utility District Announces 2-Percent Water Rate Decrease

Because of the visionary transformative leadership of our board of directors, management, and all our utility's outstanding employees, we announce the first rate decrease in our utility district's history. Water rates will decrease by 2 percent beginning May 1, 2022, for water used in May that will be billed in June 2022.

Some of you are aware that we were able to recently pay off the last of our 2011 revenue bonds by obtaining a \$5.25-million term loan from First State Bank of Texas. This \$19-million debt goes back prior to the year 2000, when our wastewater treatment system was constructed. Because of this, even with substantial cost increases to maintain our wastewater treatment system, we have been able to continue the 2009 pricing for wastewater services.

We have always done our best to keep rates as low as possible while still meeting all our utility district obligations. Our last rate increase was in 2009. We do not tax the district property owners, as most utilities do. To pay the bills, we must take care of our customers. In November 2019, we returned \$67,360 to our customers by issuing each customer a one-time \$20 bill credit. By refinancing, we have reduced our monthly debt service from \$140,300 to \$128,500 a month. This has enabled us, at long last, to have a rate reduction.

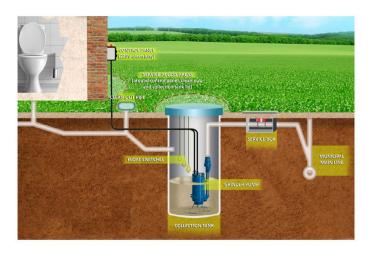
This decrease is another piece of evidence that we work for the customers of our utility, and whenever possible, we will continue to look for ways to reduce rates in spite of everincreasing material costs, new state operating mandates, and licensing fees. We are gaining about 100 customers a year, and as we continue to grow, we will be able to share the costs among a wider group of people, which should ensure that our rates continue to be carefully controlled. While all the other surrounding utilities have recently increased or will soon increase their rates, we are reducing ours. Thank you for your business.

# **Caring for Your Grinder Pump**

MUD's customers connected to public wastewater via a low-pressure sewer system will have a grinder pump on their property. Grinder pump systems have usage considerations that must be followed for the system to function properly, similar to a septic system. The system requires maintenance. Malfunctions are possible. Any irregularity in the system will trigger a red light on the system's control panel box. Please call us if the light comes on.

# Power Outages, Heavy Rain, and Natural Disasters – How can you help?

The district's water and wastewater systems remain operational during weather events. Your wastewater system, on your property, does not operate without power from your home or business. If our community loses power, please limit your water use. Limit water disposal down pipes during power outages. If you plan to evacuate



during a weather event that could produce widespread flooding, please turn off the breaker to your pump before leaving. Areas that flood experience difficulties. If your grinder tank wastewater system is underwater or your neighborhood has been flooded, your wastewater system probably will not operate normally. When this happens, please turn off the breaker to your wastewater grinder system when you are not running water or flushing your toilets. This may prevent extensive repairs to your system. If your light comes on, please call us.

#### **Routine Maintenance**

Maintenance or repairs on any wastewater system often result from flushing inappropriate materials down the toilet, pouring inappropriate materials down a drain, or placing inappropriate waste down the disposal, causing blockages. They can also result from situations beyond the property owner's control, such as excess stormwater entering the system, freezing temperatures, or regular wear and tear on system components. Learning the appropriate way to dispose of household waste protects the sewer system, keeps costs down, and protects the environment. It is also important to keep in mind that the pump is a machine and will require annual maintenance even if no inappropriate materials are placed into the system.

What NOT to Flush Down the Toilet, Pour Down a Drain, or Put Down the Disposal

- Feminine hygiene products, contraceptive devices, and diapers
- Wet wipes of any kind (even those claiming to be "flushable")
- Dental floss, Q-tips, cotton balls, paper towels, and facial tissues
- · Cooking or lubricating oils/grease and greasy foods
- Cat litter, eggshells, coffee grounds, and similar abrasive items
- Pills and other medications

#### Problems with your system?

Please contact the district office 24 hours a day, seven days a week, when you have any issues with your sewer system at (409) 745-4882. If you call after hours or on the weekends, please select option 8 to be transferred to our on-call team.

Full article reference, edited and used with permission from Lakeway MUD: https://www.lakewaymud.org/update/caring-for-your-grinder-pump/.

# Source Water Assessment

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 are based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Brad Haeggquist, Christy Davis, or Jeremy Walton, (409) 745-4882.

# **Test Results**

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set.

NOTE: No violations for regulated substances occurred during 2021.

#### **REGULATED SUBSTANCES**

SUBSTANCE	YEAR	MCL	MCLG	AMOUNT	RANGE		
(UNIT OF MEASURE)	SAMPLED	[MRDL]	[MRDLG]	DETECTED	LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2020	2	2	0.0989	0.0769–0.0989	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2021	[4]	[4]	1.29	ND-1.69	No	Water additive used to control microbes
Combined Radium (pCi/L)	2019	5	0	1.5	1.5–1.5	No	Erosion of natural deposits
Fluoride (ppm)	2021	4	4	0.99	0.99–0.99	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]– Stage 1 <sup>1</sup> (ppb)	2021	60	NA	15	11.1–17.5	No	By-product of drinking water disinfection
<b>Total Coliform Bacteria</b> (positive samples)	2021	ΤT	NA	1	NA	No	Naturally present in the environment
TTHMs [total trihalomethanes]–Stage 1 <sup>2</sup> (ppb)	2021	80	NA	58	35.5–70	No	By-product of drinking water disinfection

#### Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.237	0/30	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (ppb)	2020	15	0	0.6	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup>The value in the Amount Detected column is the highest average of all HAA5 sample results collected at a location over a year. <sup>2</sup>The value in the Amount Detected column is the highest average of all TTHM sample results at a location over a year.

# Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

#### MCL (Maximum Contaminant

**Level):** 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.

#### MCLG (Maximum Contaminant

Level Goal): 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.

#### MRDL (Maximum Residual

**Disinfectant Level):** 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.

#### MRDLG (Maximum Residual

**Disinfectant Level Goal):** 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.

#### NA: Not applicable.

**ND** (Not detected): Indicates that the substance was not found by laboratory analysis.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).