

2020 Consumer Confidence Report for Public Water System The Refuge for DMST

This is your water quality report for January 1 to December 31, 2020

The Refuge for DMST provides ground water from Carrizo-Wilcox Aquifer located in Bastrop County.

For more information regarding this report contact:

Name The Refuge for DMST

Phone 512-402-1990

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (512) 402-1990.

Definitions and Abbreviations

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The following tables contain scientific terms and measures, some of which may require explanation.

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 or 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 Contaminant Level Goal or 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 residual disinfectant level or 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.

Maximum residual disinfectant level goal or 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.

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 (a measure of turbidity)

pCi/L

picocuries per liter (a measure of radioactivity)

Definitions and Abbreviations

ppb:	micrograms per liter or parts per billion
ppm:	milligrams per liter 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 or TT:	A required process intended to reduce the level of a contaminant in 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.

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).

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>.

Information about Source Water

No Source Water Assessment for your drinking water source(s) has been conducted by the TCEQ for your water system. The report describes the susceptibility and the types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment allows us to focus our source water protection strategies.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	10/28/2019	1.3	1.3	0.13	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	10/28/2019	0	15	0.7	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2020 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2020	4	4.2 - 4.2	No goal for the total	60	ppb	N	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

Total Trihalomethanes (TTHM)	2020	22	22.3 - 22.3	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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*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

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	05/28/2019	0.0634	0.0634 - 0.0634	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	05/28/2019	0.31	0.31 - 0.31	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2020	0.05	0.05 - 0.05	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2020	0.64	0.61 - 0.68	4	4	ppm	N	Water additive used to control microbes.

Violations

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	02/01/2020	03/03/2020	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

Free Chlorine Disinfectant was above the minimum of 0.2 mg/L allowed for this district for the months of January, February, and March 2020. Please disregard violation on previous page.



Home Water System My Account

Hello, ER052954

Information:

The record has been saved

Help Success Stories Home Logout



Enter your quarterly disinfection information in the fields below. Click on "Validate" to check your data and to calculate the quarterly average and monthly percentages. Click the "Submit" button when you are ready to transmit your data.

Water System

- Create New Reports
- Upload SWMOR Reports
- Retrieve Saved Reports
- View Submission

Disinfectant Level Quarterly Operation Report Form

Water System Name: **WATER SYSTEM**

Refuge D002

PWS ID: **TX0110063**

Quarter: *

Year: *

Report Form ID: **64923**

Type of Disinfectant Used in Distribution System*:

* If you used chloramines and free chlorine at any time during this quarter, select both.

First Month of Quarter: Monthly Summary

Month: **January**

Was the PWS active this month?

Average of all disinfectant residuals for this month*	Number of residuals collected this month*	Number below MIN for this month*	Number with NO residual for this month*
<input type="text" value="0.52"/> mg/L	<input type="text" value="4"/> readings	<input type="text" value="0"/> readings .0 %	<input type="text" value="0"/> readings .0 %

Second Month of Quarter: Monthly Summary

Month: **February**

Was the PWS active this month?

Average of all disinfectant residuals for this month*	Number of residuals collected this month*	Number below MIN for this month*	Number with NO residual for this month*
<input type="text" value="0.6"/> mg/L	<input type="text" value="4"/> readings	<input type="text" value="0"/> readings .0 %	<input type="text" value="0"/> readings .0 %

Third Month of Quarter: Monthly Summary

Month: **March**

Was the PWS active this month?

Average of all disinfectant residuals for this month*	Number of residuals collected this month*	Number below MIN for this month*	Number with NO residual for this month*
<input type="text" value="0.7"/> mg/L	<input type="text" value="5"/> readings	<input type="text" value="0"/> readings .0 %	<input type="text" value="0"/> readings .0 %

Quarterly Summary and Certification

Average of all disinfectant residuals for this quarter	Lowest residual for this quarter*	Highest residual for this quarter*
<input type="text" value="0.61"/> mg/L	<input type="text" value="0.25"/> mg/L	<input type="text" value="1.1"/> mg/L

License#:

Report Comments: