2019 Annual Drinking Water Quality Report

VALLEY MUNICIPAL UTILTY DISTRICT NO. 2
100 Hidalgo Avenue, Rancho Viejo, Texas
(956) 350-4136

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Public Participation Opportunities

Date: July 21, 2020
Time: 9:00 AM
Location: 100 Hidalgo
Phone No: (956) 350-4136

Valley MUD #2 has regular board meetings on the third Tuesday of every month. These meetings are open to the public. To request an agenda , please call us.

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.

SOURCES OF 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. Contaminants that may be present in source water before treatment 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 run off, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Where do we get our drinking water? Valley MUD # 2 has 3 sources of drinking water. Approximately 50% of our drinking water comes from the Resaca del Rancho Viejo which is fed by the Rio Grande river. Another 30% comes from a well on District property drilled into the gulf coast aquifer. This water is treated with a reverse osmosis system before it is blended with water from the surface water plant and pumped into the distribution system. The remaining water comes from the Southmost Regional Water Authority, a regional groundwater desalinization plant .

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (956) 350-4136 para hablar con una persona bilingüe en español.

The **TCEQ** completed an assessment of your 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 sampling data. Any detections of this contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact Mr. Javier Ramos at (956) 350-4136 or write us at 100 Hidalgo Avenue, Rancho Viejo, Tx. 78575

ALL drinking water may contain contaminants.

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 (1-800-426-4791).

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 constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

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.

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

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.

Inorganic Contaminants

Collection Date	Substance (UNIT OF MEASURE)	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Violation	Source of Constituent
2019	**Arsenic (ppb)**	4.9	4.9	10.0	0	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
2019	**Barium (ppm)**	0.0677	0.0677	2.0	2.0	N	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits.
2019	**Fluoride (ppm)**	0.42	0.42	4	4	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2019	**Nitrate {measured as Nitrogen} (ppm)**	0.08	0.05-0.08	10	10	N	Runoff from fertilizer use; Leaching from septic tank sewage; Erosion of natural deposits.
2019	**Cyanide (ppb)**	110	110	200	200	N	Discharge from plastic and fertilizer factories; Discharge from steel / metal factories.
2019	**Selenium (ppb)**	4.9	4.9-4.9	50	50	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharges from mines.
	Radioactive Contaminants (Unit of Measure)	**Highest Level Detected**	**Range of Levels Detected**	**MCL**	**MCLG**	**Violation**	**Source of Constituent**
2018	**Combined Radium 226 & 228 (pCi/L)**	1.5	1.5-1.5	5	5	N	Erosion of Natural Deposits
2019	**Xylenes (ppb)**	0.5	0.5	10	10	N	Discharge from petroleum factories, Discharge from Chemical factories

2019	Average Level of Quarterly data	Maximum Detected	Minimum Detected	MRDL	MRDLG	
Chloramine	2.21	2.64	1.77	4.0	<4.0	Disinfectant used to control microbes

	Contaminant	Highest Level	Range of Level	MCLG	MCL	Unit of Measure	Violation	Source of Contaminant
2019	Haloacetic Acids (HAA5)	33.0	28.0 - 33.0		60	ppb	N	Byproduct of Drinking Water Disinfection
2019	Total Trihalomethanes	33.0	28.0 - 33.0		80	ppb	N	Byproduct of Drinking Water Disinfection

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Year	Constituent	Average Level	Minimum Level	Maximum Level	MCL	Units of Measure	Reason for Monitoring
2019	**Chloroform**	4.92	1.0	7.8	100	ppb	Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants
2019	**Bromoform**	5.8	1.0	14.1	100	ppb	
2019	**Bromodichloromethane**	9.9	1.0	20.0	100	ppb	
2019	**Dibromochloromethane**	12.94	1.0	35.0	100	ppb	

Chlorine / Chloramine Residual
Disinfection Byproducts

Lead and Copper

Year	Constituent	MCLG	Action Level (AL)	90th Percentile	#Sites Over AL	Units	Violation	Source of Constituent
2017	**Copper**	1.3	1.3	0.0268	0	Ppm	N	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
2017	**Lead**	0	15	0.763	0	Ppb	N	Corrosion of household plumbing systems, erosion of natural deposits

Lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant woman 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 , bur we cannot control the variety of material 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 Hotline or at http;//www.epa.gov/safewater/lead

Turbidity

	Limit (Treatment Technique)	Level Detected	Likely Source of Contamination
Highest Single Measurement	1 NTU	.66 NTU	Soil runoff
Lowest monthly % meeting Limit	0 . 3 NTU	96 %	Soil runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Total Organic Carbon

The Percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted on this report.

COLIFORMS

What are coliforms?

Coliform bacteria are used as indicators of microbial contamination of drinking water because they are easily detected and found in the digestive tract of warm blooded animals. While not themselves disease producers, 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 bacteriologically safe for human consumption.

The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

Fecal coliform (mostly E-coli), is a portion of the coliform bacteria group originating in the intestinal tract of warm-blooded animals that passes into the environment as feces. Fecal coliform is often used as an indicator of the fecal contamination of domestic water supply.

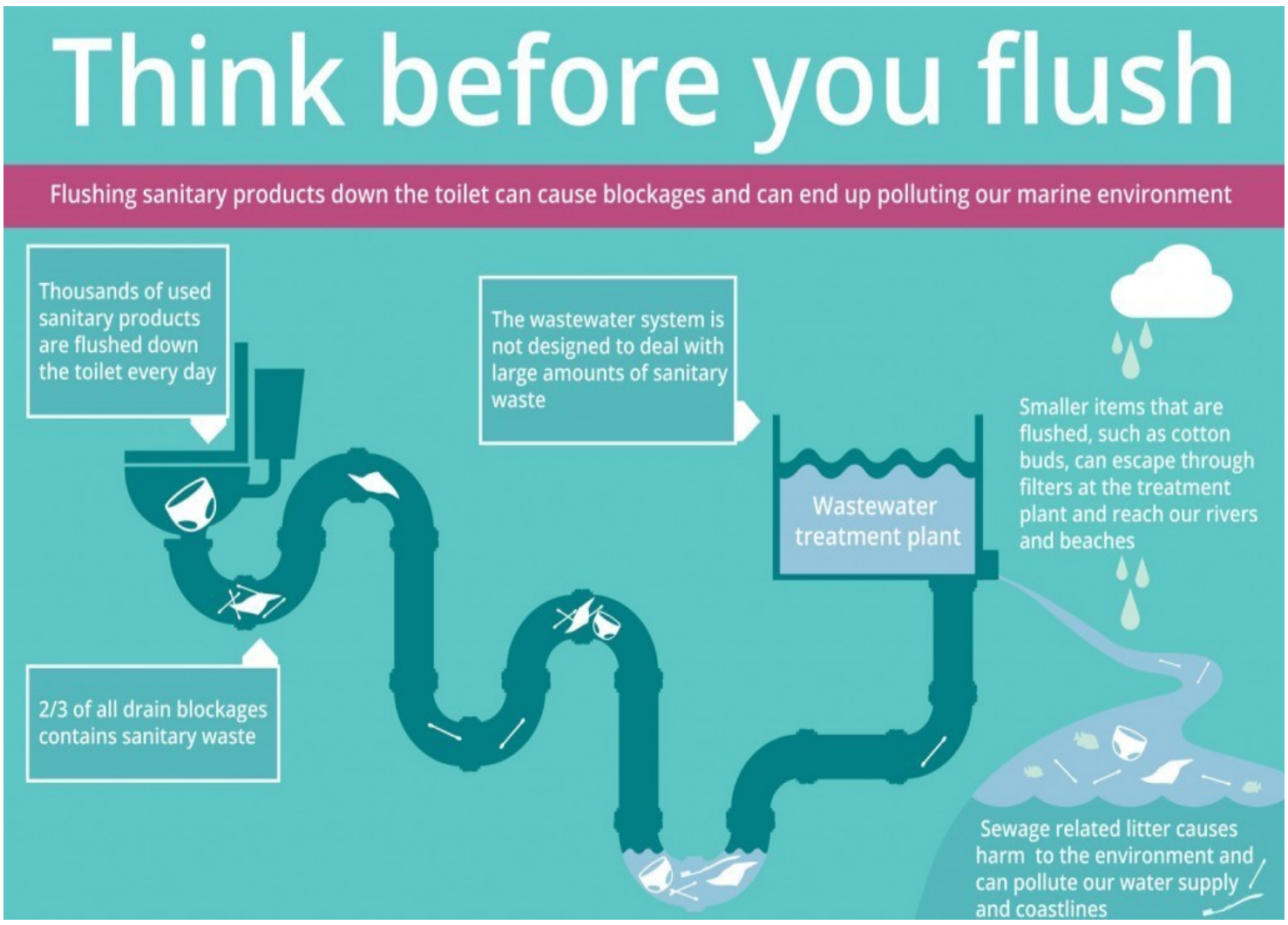
Valley MUD #2 had zero positive test for total coliform in the year of 2019.

Secondary and Other Constituents - Not Regulated

Year (Range)	Inorganic Contaminants	Highest Level Detected	Range of levels detected	MCLG	MCL	Unit of measure	Likely Source of Constituent
2019	Aluminum	0.23	0.23		0.2	ppm	Abundant naturally Occurring Element
2019	Alkalinity Bicarbonate	109	109		NA	ppm	Corrosion of carbonated rocks such as limestone
2019	Calcium	56.1	56.1		NA	ppm	Abundant Naturally Occurring Element
2019	Chloride	179	179		300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2017	Copper	0.0038	0.0038		NA	ppm	Corrosion of household plumbing systems; erosion of natural deposits, leaching from wood preservatives
2019	Silver	0.01	0.01	0.01	0.01	ppm	Erosion of natural deposits
2019	Iron	0.01	0.01	0.01	.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2019	Magnesium	19.8	19.8		NA	ppm	Abundant naturally occurring element
2019	Manganese	0.0011	0.0011	0.001	0.05	ppm	Abundant naturally occurring element
2019	Nickel	0.0019	0.0019		NA	ppm	Erosion of Natural Deposits
2019	pH average	7.54	7.37-7.86	7.86	>6 : 9<	Positive Hidrogn Ions	Corrosive measurement of water
2019	Sodium	154	154		NA	ppm	Erosion of natural deposits, byproduct of oil field activity.
2018-2019	Sulfate	231	231-261	300	300	ppm	Naturally Occurring;, common industrial byproduct, byproduct of oil field activity
2018-2019	Total Alkalinity	89	89-109		NA	ppm	Naturally occurring soluble mineral salts.
2019	Total Dissolved Solids	730	730	1000	1000	ppm	Total dissolved mineral constituents in water.
2018	Total Hardness as CaCO3	184	184		NA	ppm	Naturally occurring calcium
2019	Zinc	0.005	0.005	0.005	5	ppm	Moderately abundant naturally occurring element used in the metal industry.

State Water Loss Audit

In the water loss audit submitted to Texas Water Development Board for the time period of January through December 2019, our system lost an estimated 28,235,325 (15.53 %) of water through main breaks, leaks and other causes. If you have any questions about the water loss audit please call 956-350-4136



Disposable does not always means flushable

Valley Municipal Utility District is committed to provide reliable sewer service to all its customers, *BUT WE NEED YOUR HELP!*

Please DO NOT put in drains or flush down:

- ***Cleaning wipes and baby wipes, <u>they do not dissolve</u>***
- ***Paper towels***
- ***Kitty litter***
- ***Plastics or latex items***
- ***Needles***

These items, and other solid materials, should be bagged and placed in the trash.

We need to be careful with what we put down our drains and flush down our toilets.

Please share this information with your friends and family

Thank you for being kind to your sewer lines!