



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

### **PUBLIC PARTICIPATION OPPORTUNITIES**

For more information regarding this report please call Mrs. Dora Thompson during normal business hours (8:30 AM to 4:30 PM) Monday through Friday at (956) 585-6081 and she will be happy to explain the report and answer your questions. Written comments may be sent to Sharyland Water Supply Corporation, P.O. Box 1868, Mission, Texas 78573. Our office is located at Shary Road and 5 Mile Line, or 4210 East Main Ave., Alton, Texas. The Board of Directors meets every third Thursday at 6:30 P.M., in the offices of the Corporation.

### **EN ESPAÑOL**

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (956) 585-6081.

### **SPECIAL NOTICE**

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).

### **HEALTH INFORMATION ABOUT 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. Sharyland Water Supply Corporation is responsible for providing high quality drinking water, but we cannot control the variety of materials used in private 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 <https://www.epa.gov/safewater/lead>.

### **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.

**2019**

**ANNUAL DRINKING WATER QUALITY REPORT**

**(CONSUMER CONFIDENCE REPORT)**

**FOR THE PERIOD OF JANUARY 1 TO DECEMBER 31, 2019**

**PO BOX 1868  
MISSION, TX 78573-0031**

**[www.sharylandwater.com](http://www.sharylandwater.com)  
Phone: 956-585-6081**

- 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. Food and Drug Administration 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 our business office at (956) 585-6081.

## WHERE DO WE GET OUR DRINKING WATER?

We get our water from the Rio Grande River, a SURFACE water source. From there it comes through the irrigation canal systems and is collected at our reservoirs until it is sent through the purification process. Water Treatment Plant No.1 is located at 3907 E. Main Ave., Alton, Texas and receives raw water via a canal system owned by United Irrigation District. Water Treatment Plant No. 2 is located at 12200 N. Ware Rd., McAllen, Texas, and receives raw water via a canal system owned by Hidalgo County Irrigation District #1. Water Treatment Plant No. 3 is located at 1310 W. St. Jude Ave., Alton, Texas, and receives raw water via a canal system owned by United Irrigation District.

## INFORMATION ABOUT SOURCE WATER

The TCEQ completed an assessment of your source water and results indicated 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 Mr. Gerardo Gracia at (956) 585-6081 during normal business hours (8:30 AM to 4:30 PM) Monday through Friday or refer to the Source Water Assessment and Protection Viewer available at the following URL: <https://www.tceq.texas.gov/gis/swaview>. Further details about sources and source water assessments are available in Texas Drinking Water Watch at the following URL: <https://dww2.tceq.texas.gov/DWW/>.

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

## DEFINITIONS AND ABBREVIATIONS

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

**Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Action Level (AL):** 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.

**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 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 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.

**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.

**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.

**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)

**ppb:** micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water

**ppm:** milligrams per liter or parts per million - or one ounce in 7,350 gallons of water

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water

**ppt:** parts per trillion, or nanograms per liter (ng/L)

**ppq:** parts per quadrillion, or picograms per liter (pg/L)

## 2019 REGULATED CONTAMINANTS DETECTED

### Disinfectant Residual Reporting

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Source of Chemical
Chloramines	2019	2.49	0.8	3.9	4.0	<4.0	ppm	N	Water additive used to control microbes.

### Coliform Bacteria

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	na	0	0	N	Naturally present in the environment.

### Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	01/16/18	1.3	1.3	0.071	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	01/16/18	0	15	0	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

\*Note: Most recent compliance sampling period for lead and copper was 2017-2018.

## Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2019	3.95	0.047 – 3.95	0.8	1	ppm	Y	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2019	23	9.7 – 31.7	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 (TTHMs)	2019	31	12.8 – 40.2	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	06/24/19	0.0965	0.0927 - 0.0965	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	06/24/19	0.7	0.61 - 0.67	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]	06/24/19	0.14	0.08 - 0.14	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

**Nitrate and Nitrite Advisory** - Nitrate in drinking water at levels above 10 ppm and Nitrites above 1 ppm are a health risk for infants of less than six months of age. High nitrate and nitrite levels in drinking water can cause blue baby syndrome. Levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should seek advice from your health care provider.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	06/24/19	6.2	6.2 – 6.2	0	50	pCi/L*	N	Decay of natural and man-made deposits.

\* EPA considers 50 pCi/L to be the level of concern for beta particles.

Uranium	06/24/19	1.1	1.1 – 1.1	0	30	ug/l	N	Erosion of natural deposits.
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## Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest single measurement	0.31 NTU	1 NTU	N	Soil runoff.
Lowest monthly % meeting limit	100%	0.3 NTU	N	Soil runoff.

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

### 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 in the violations section.

## Violations

Chlorite			
Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant women who drink water containing chlorite in excess of the MCL. Some people may experience anemia.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, AVERAGE (CHLORITE)	01/01/2019	01/31/2019	Water samples showed that the amount of this contaminant in our drinking water was above its standard for the period indicated. Because of the contaminant and the sample location, this posed an acute health risk.

## Other Constituents (No associated adverse health effects)

Constituent	Year	Average Level	Minimum Level	Maximum Level	Maximum Limit	Unit of Measure	Source of Constituent
Total Hardness as CaCO <sub>3</sub>	2019	249	244	253	na	ppm	Naturally occurring soluble minerals.
Total Alkalinity as CaCO <sub>3</sub>	2019	84	75	94	na	ppm	Naturally occurring soluble mineral salts.

## Secondary Standards

Secondary	Year	Average Level	Minimum Level	Maximum Level	Maximum Limit	Unit of Measure	Source of Constituent
Total Dissolved Solids (TDS)	2019	691	680	696	1000	ppm	Total dissolved mineral constituents in water.
pH	2019	7.6	7.4	7.8	6.5 – 8.5	units	Measure of corrosivity of water.
Aluminum	2019	0.083	0.070	0.094	0.05 – 0.2	ppm	Natural leaching from rocks and soil; industrial process byproduct.
Chloride	2019	145	141	148	250	ppm	Chloride is a compound commonly found in bodies of water and soil.
Iron	2019	0.031	0.031	0.031	0.3	ppm	Naturally found in soil and water; corrosion from metals.
Manganese	2019	0.0032	0.0023	.0044	0.050	ppm	Naturally occurring element found in soil and water.
Sulfate	2019	256	253	258	300	ppm	Dissolved from natural occurring minerals in water; industrial process byproduct.
Zinc	2019	0.0523	0.0085	0.0962	5.0	ppm	An abundant element found in soil and water.

## <sup>4</sup> Fourth Unregulated Contaminant Monitoring Rule (UCMR4)

<sup>1</sup> Contaminant	Collection Date	Avg Level	Minimum Level	Maximum Level	<sup>2</sup> Reference Concentration	Unit of Measure	Source
Manganese	2019	3.26	0.7	14.3	300	ppb	Naturally occurring element found in soil and water.
Germanium	2019	0.4	0.4	0.4	na	ppb	Naturally occurring element and is commonly used as germanium dioxide in industrial processes.
Bromide	2019	311	269	362	na	ppb	Bromide is a compound commonly found in bodies of water and soil.
Total Organic Carbon (TOC)	2019	3665	3350	4060	na	ppb	TOC is a measure of the total amount of carbon in organic compounds in water.
<sup>3</sup> HAA5	2019	12.793	10.805	16.672	60	ppb	Disinfection byproducts.
<sup>3</sup> HAA6Br	2019	15.903	9.746	21.564	na	ppb	Disinfection byproducts.
<sup>3</sup> HAA9	2019	21.448	16.616	29.343	na	ppb	Disinfection byproducts.
*Cylindrospermopsin	2019	0.23	0.23	0.23	0.7 – 3.0	ppb	Cyanotoxin produced by algae in water.

\* one sample detected under the reference range; 0.7 (infants and young children); 3.0 (school age children and adults).

<sup>1</sup> The detection of a UCMR4 contaminant does not represent cause of concern, in and of itself.

<sup>2</sup> Reference concentrations are health-based and provide context for the detection of a UCMR contaminant. They do not represent regulatory limits or action levels and should not be interpreted as an indication that the Agency intends to establish a future drinking water regulation.

<sup>3</sup> Haloacetic acids are byproducts formed in water during the disinfection process; HAA5 are regulated by TCEQ.

<sup>4</sup> EPA uses the Unregulated Contaminant Monitoring Rule (UCMR) program to collect nationally representative data for contaminants suspected to be present in drinking water, but that do not have regulatory standards.

This monitoring is used by EPA to understand the frequency and level of occurrence of unregulated contaminants in the nation's public water systems (PWSs).

## Water Loss

In the water loss audit submitted to the Texas Water Development Board for the time period of January to December 2019, our system lost an estimated **349,199,354** gallons **11.31%** of water. If you have any questions about the water loss audit please call Mr. Gerardo Gracia during normal business hours (8:30 AM to 4:30 PM) Monday through Friday at (956) 585-6081.