

2016 ANNUAL DRINKING WATER QUALITY REPORT



Sharyland
WATER SUPPLY
CORPORATION
Service • Community • Integrity

(CONSUMER CONFIDENCE REPORT)
FOR THE PERIOD OF JANUARY 1 TO DECEMBER 31, 2016

www.sharylandwater.com • PHONE (956) 585-6081

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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. Sanchez 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 informe contiene información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (956) 585-6081 (telephone number for assistance in Spanish).

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 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>.

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 EPAs Safe Drinking Water Hotline at (800-426-4791).

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 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. Contaminants may be found in drinking water that may cause taste, odor or color 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.

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.

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.

SOURCE WATER ASSESSMENTS

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 Confidence Report. For more information on source water assessments and protection efforts at our system, contact Mr. Jose A. Villescas at (956) 585-6081 during normal business hours (8:30 to 4:30) Monday through Friday or refer to the Source Water Assessment Viewer available at the following URL: <http://www.tceq.texas.gov/gis/swaview>. Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWWW/>.

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

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

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)

na: not applicable

mrem: millirems per year (a measure of radiation absorbed by the body)

NTU: nephelometric turbidity units (a measure of turbidity)

pCi/L: picocuries per liter (a measure of radioactivity)

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

ppm: parts per million, or milligrams per liter - 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)

2016 REGULATED CONTAMINANTS DETECTED

Disinfectant Residual Reporting

Disinfectant	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
Chloramines	2016	2.7	2.1	3.1	4.0	<4.0	ppm	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	1.5		0	N	Naturally present in the environment.

Lead and Copper Definitions:

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.

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.068	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	15	1	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2016	0.8	0 - 0.8	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2016	12	6.2 - 15.4	<60	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHMs)	2016	16	8 - 24	<80	80	ppb	N	By-product of drinking water disinfection.

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2016	0.117	0.1 - 0.117	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Flouride	2016	0.6	0.54 - 0.61	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]	2016	0.46	0.06 - 0.46	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Nitrate Advisory - Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate 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.

Selenium	2016	3.4	0 - 3.4	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2016	5.8	5.8 - 5.8	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.

Combined Radium 226/228	02/22/2011	1	1 - 1	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2016	3.3	2 - 3.3	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	2016	2.3	2.3 - 2.3	0	30	ug/l	N	Erosion of natural deposits.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.8 NTU	N	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	99%	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.

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.

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Constituent	Year	Average Level	Minimum Level	Maximum Level	Maximum Contaminant Level Allowed	Unit of Measure	Source of Constituent
Hardness as Ca/Mg	2016	354	341	366	NA	ppm	Naturally occurring calcium and magnesium.
Total Alkalinity as CaCO3	2016	115	104	125	NA	ppm	Natural occurring soluble mineral salts.
Total Dissolved Solids (TDS)	2016	899	734	987	1000	ppm	Total dissolved mineral constituents in water.
pH	2016	7.6	7.5	7.6	>7.0	units	Measure of corrosivity of water.

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.

Water Loss

In the water loss audit submitted to the Texas Water Development Board for the time period of January to December 2016, our system lost an estimated **144,423,880** gallons (**5.1%**) of water. If you have any questions about the water loss audit please call Mr. Jose A. Villescas during normal business hours (8:30 AM to 4:30 PM) Monday through Friday at (956) 585-6081.