

2016 Annual Drinking Water Quality Report

(Consumer Confidence Report)

THE CITY OF DONNA

956-464-7861

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; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800) 426-4791.

Public Participation Opportunities

Main Office Phone Number:

(956) 464-7861

For any questions regarding your drinking water or any of the information provided in the following pages please call (956) 464-7861. To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us at the phone number listed above.

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.

WATER SOURCES: 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: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

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) 464-7861 para hablar con una persona bilingüe en español.

Where do we get our drinking water?

Our drinking water is obtained from SURFACE water sources. It comes from the following source: RIO GRANDE, DONNA IRRIGATION DISTRICT #1 CANAL. The Texas Commission on Environmental Quality (TCEQ) completed an assessment of your source water and results indicated 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 report. For more information on source water assessments and protection efforts at our system, please contact us at (954) 464-7861

ALL drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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's are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

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.

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.

MPL – State Assigned Maximum Permissible Level 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.

ABRREVATIONS

LRAA – Locational Running Annual Average

LRC – Lead and Copper Rule

MPL - Maximum Permissible Level

NTU - Nephelometric Turbidity Units 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)

ABRREVATIONS cont.

ppb - parts per billion, or micrograms per liter (ug/L)

RAA – Running Annual Average

NA – not applicable

ND - Not detected

Inorganic Contaminants

Sample		MCLG	MCL,	Your	Rai	nge	Violetien	
Date	Contaminants	or MRDLG	TT, or MRDL	Water	Low	High	Violation	Typical Source of Contaminant
2016	Barium (ppm)	2	2	0.0995	N	A	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
2016	Copper (ppm)	NA	MPL	0.0699 (MPL)	N	A	No	Corrosion of household plumbing systems; Erosion of natural deposits.
2016	Fluoride (ppm)	4	4	0.43	N	A	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
2016	Nitrate [measured as Nitrogen] (ppm)	10	10	0.63	0.63	0.63	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
2016	Selenium (ppm)	0.05	0.05	.0036	NA		No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

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 ask advice from your health care provider.

Maximum Residual Disinfectant Level

1			MCI Your	Vour	Range			
Year	Disinfectant	MRDL MRDLG	MCL, TT, or MRDL	Water	Low	High	Violation	Typical Source
2016	Chloramine (as Cl2) (ppm)	4	4	3.6	1.0	5.0	No	Disinfectant used to control microbes.

Health information for Chloramine (as Cl2) - Some people who use water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.

Radioactive Contaminants

		Contaminant MRDL MCL, Your Water Low High		V	Range			
Year	Contaminant		High	Violation	Source of Contaminant			
2011	Beta/photon emitters (pCi/L)	NA	50	ND	N	IA	No	Decay of natural and man-made deposits. The EPA considers 50 pCi//L to be the level of concern for Beta particles
2011	Radium (combined 226/228) (pCi/L)	NA	5	ND	N	IA	No	Erosion of natural deposits

Disinfection Byproducts Stage 2

				Γ, or Water Low Hig	Rai	nge		
Year	Contaminant	MRDL MRDLG	MCL, TT, or MRDL		High	Violation	Source of Contaminant	
2016	Chlorite (ppm)	0.8	1	0.49	ND	0.49	No	By-product of drinking water disinfection
2016	Total Haloacetic Acids (HAA5)(ppb)	NA	60	22* (LRAA)	7.0	23	No	Byproduct of drinking water disinfection.
2016	Total Trihalomethanes (TTHM) (ppb)	NA	80	38.4* (LRAA)	25	64	No	Byproduct of drinking water disinfection.

*Stage 2 - For Stage 2 Haloacetic Acids or TTHM, the level detected is the highest locational running annual average (LRAA). The locational running average is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Lead and Copper

Year	Contaminant	MCLG	AL	Your Water	# Samples Exceeding AL	Exceeds AL	Source of Contaminant
2014	Lead – action level at consumer taps (ppb)	0	15	2.7	1	No	Corrosion of household plumbing systems; erosion of natural deposits.
2014	Copper - action level at consumer taps (ppm)	1.3	1.3	0.18	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Additional Health Information for 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. This water supply is responsible for providing high quality drinking water, but 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.

Turbidity

Year	Contaminant	MRDL MRDLG	MCL, TT, or MRDL	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Violation	Source of Contaminant
2016	Turbidity (NTU)	NA	0.3	0.37	99% *	No	Soil runoff

^{*} The highest single measurement was 0.37. Any measurement in excess of 1.0 is a violation unless otherwise approved by the state.

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, and diarrhea and associated headaches.

Total Organic Carbon

Year	Contaminant	Your Water	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2016	Source Water	5.7	4.3	8.1	ppm	Naturally present in the environment.
2016	Treated Water	3.5	2.9	4.2	ppm	Naturally present in the environment.
2016	Removal Ratio	1.40	1.0	1.79	removal ratio*	N/A

^{*}Removal ratio is the amount of TOC removed by the treatment process divided by the amount of TOC required by TCEQ to be removed.

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

CRYPTOSPORIDIUM MONITORING INFORMATION: The City is monitoring for Cryptosporidium, a microbial parasite that may be commonly found in surface water. The monitoring for Cryptosporidium is completed by the City as a quality control test and is not required by the TCEQ. Cryptosporidium may come from animal and human feces in the watershed. The results of our monitoring indicated the presence of Cryptosporidium in the raw (untreated) water during the month of February 2016. The testing methods used cannot determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

Total Coliform

Year	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Violation	Source of Contaminant
2016	Total Coliform Bacteria	0	*	Presence	No	Naturally present in the environment.

^{*}Greater than one positive coliform in any single month.

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, 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 microbiologically safe for human consumption

Additional Contaminants

In an effort to insure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed below were found in your water.

Year	Contaminant(s)	MCL or MCLG	State MPL	Your Water	Violation	Explanation and Comment
2016	Aluminum (ppm)	0.2	0.2	0.06	No	Erosion of natural deposits; residue from some surface water treatment processes. Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.

Secondary and Other Constituents Not Regulated

(No associated adverse health effects)

Year	Constituent	Average Level	Secondary Limit	Unit of Measure	Source of Constituent
2016	Bicarbonate	124	NA	ppm	Corrosion of carbonate rocks such as limestone.
2016	Chloride	167	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2016	Hardness as Ca/Mg	107	NA	ppm	Naturally occurring calcium and magnesium.
2016	Hardness, Total as CaCO3	307	NA	ppm	Naturally occurring
2016	Iron	< 0.01	0.3	ppm	Natural geologic sources and house pipes.
2016	Magnesium	25.9	NA	ppm	Naturally occurring
2016	Manganese	0.005	0.05	ppm	Naturally occurring in rocks and soil.
2016	Nickel (ppm)	.002	0.1	ppm	Erosion of natural deposits; discharge from metal factories
2016	рН	7.5	>7.0	units	Measure of corrosively of water.
2016	Potassium	6.71	NA	ppm	Naturally occurring
2016	Sodium	148	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2016	Sulfate	335	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2016	Total Alkalinity as CaCO3	130	NA	ppm	Naturally occurring soluble mineral salts.
2016	Total Dissolved Solids	850	1000	ppm	Total dissolved mineral constituents in water.

^{*}Please go to http://dww2.tceq.texas.gov/DWW/ for more information regarding your drinking water.