2018 ANNUAL DRINKING WATER QUALITY REPORT

Consumer Confidence Report



Dear Water Consumer,

The Nueces County WCID #3 is pleased to present its 2018 Annual Water Quality Report in accordance with the United States Environmental Protection Agency (EPA) National Primary Drinking Water Regulations.40 CFR Part 141 Subpart O, which requires all drinking water suppliers to provide the public with an annual statement describing the water supply and the quality of its water.

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

IMPORTANT HEALTH INFORMATION:

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* and other microbial contaminants are available from the Safe Drinking Water Hotline (800)-426-4791.

INFORMATION ON SUBSTANCES THAT COULD BE IN YOUR WATER:

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 regualtions establish limits for contaminants in bottles water which must provide the same protection for public health.

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 , radio-active material, and substances resulting from the presence of animals or from human activity.

Drinking water including bottled water, may reasonably be expected to contain as 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.

Further, 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 at (361) 387-4549.

Substances that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from waste water 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 waste water 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.

LEAD IN HOME PLUMBING:

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 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:

TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminates will be found in this Consumer Confidence Report:

For more information on source water assessments and protection efforts at our system contact:

Hector Benavidez, Interim District Manager

(361) 387-4549

Source Water Names: Nueces River, Robstown Reservoir

Type of Source Water: Surface Water

Where Does My Water Come From?

The source of drinking water used by Nueces County WCID #3 is surface water from the Nueces River located in Nueces County.

2018 WATER QUALITY TEST RESULTS								
Lead and Copper								
Lead and Copper	Data Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/01/2016	1.3	1.3	0.13	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
			Re	gulated Contamir	ants			
Disinfection By- Products	Collection Date	Highest Single Sample	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2018	0.714	0.076-0.714	0.8	1	ppm	Ν	By-product of drinking water disinfection
Halo acetic Acids (HAA5)*	2018	38	18.9-49.9	No goal for the total	60	ppb	И	By-product of drinking water disinfection
Total Trihalomethanes (TThm)**	2018	104	30.3-104	No goal for the total	80	ppb	Υ	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. **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 Single Sample	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic*	2018	7	4.2-7	0	10	ppb	И	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2018	0.159	0.159-0.159	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2018	0.6	0.57-0.57	4	44	ppm	И	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and

aluminum factories.

Nitrate [measured as Nitrogen]	2018	0.26	0.26-0.26	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite (measured as Nitrogen)	08/06/2013	0.02	0.02-0.02	11	1	ppm	И	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2018	10	9,7-9.7	50	50	ppb	Ν	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
While your drinking	water monte ED	Astandarda	for amonia it dos	c contain low le	avole of amonia	EDAcetand	ard hal	ances the current understanding

While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenics possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Radioactive Contaminants								
	Collection Date	Highest Single Sample	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/ photon emitters	03/21/2017	12.3	12.3-12.3	0	50	pCi/L*	И	Decay of natural and man- made deposits.
Uranium	03/21/2017	2.9	2.9-2.9	0	30	ug/l	N	Erosion of natural deposits.
		*EPA co	onsiders 50 pCi/L to	be the level o	f concern for be	eta particl	es	
Disinfectant Residual Table								
Disinfectant	Year	Average level	Minimum level/Maximum level	MRD L	MRDL G	Units	Violation	Likely Source of Contamination
Chloramine	2018	2.94	1.4-4.2	4	4	ppm	N	Water Additives used to control microbes
Turbidity								
	Limit (Tred Technic		Level Det	ected	Violatio	on	Likely	Source of Contamination
Highest single measurement	1 NT	U	0.34 N	TU	N			Soil runoff.
Lowest monthly % meeting limit	0.3 N		1009		N			Soil runoff.
Information Statement: Turbidity is a measurement of 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.

Definitions

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 in a water system must follow.

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

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 occassions.

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 per year (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.

ppq: parts per quadrillioin, or picograms per liter

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.

Violations Table

Long Term Enhanced SWTR

The Long Term Enhanced Surface Water Treatment Rule supplements existing regulations by targeting additional Cryptosporidium treatment to higher risk systems. It also contains provisions to reduce risks from uncovered finished water reservoirs and to ensure that systems maintain microbial protection when reducing the formation of disinfection byproducts.

Violation Type	Violation Begin	Violation End	Violation Explanation
Monitoring, RT Major (LT-Filtered)	08/01/2018	08/31/2018	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. The plant was late running an integrity test within a seven day period.

Total Trihalomethanes (TTHM)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	01/01/2018	03/31/2018	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	04/01/2018	06/31/2018	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

