City of Enterprise

Water Quality Report 2019

Covering Calendar Year- 2018

This brochure is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are made continually to improve their water systems. To learn more about your drinking water, please attend any of the regular city council meetings which are held the second Tuesday of each month at 7:00 p.m. in the city council meeting chambers. For more information please contact, Paul Froelich at 785-263-8521.

Your water comes from 2 Ground Water Wells.

Some people may be more vulnerable to contaminates in drinking water than the general population. Immuno-compromised persons such as those 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. EPA/CDC guidelines on appropriate means to lessen the rick of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

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 the 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 (800-426-4791).

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, live stock 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 storm water run-off, agriculture, and residential users.
Radioactive contaminants, which can be naturally occurring or the result of mining activity.
Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

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. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of 2 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing 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.

Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2018 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2018. The state requires us to monitor for certain contaminants less than once per year because the concentrations are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. ***The bottom line is that the water that is provided to you is safe!***

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the "Goal" is the level of a contaminant in drinking water below which there is no known or expected rick to human health. MCLGs allow for a margin of safety.
Maximum Contaminant Level (MCL): the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as a close to the MCLGs as feasible using best available treatment technology.
Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.
Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.
Treatment Technique (TT): a required process intended to reduce levels of a contaminant in drinking water.
Maximum Residual Disinfectant Level (MRDL): the highest level of a disinfectant allowed on drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Non-Detects (ND): lab analysis indicates that the contaminant is not present.
Parts per Million (ppm) or milligrams per liter (mg/l)
Parts per Billion (ppb) or micrograms per liter (ug/l)
Picocuries per Liter (pci/l): a measure of the radioactivity in water.
Millirems per Year (mrem/yr): measure of radiation absorbed by the body.
Million Fibers per Liter (MFL): a measure of the presence of asbestos fibers that are longer than 10 micrometers.
Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for ground water systems.

Running Annual Average (RAA) an average of sample results obtained over the most current 12 months and used to determine compliance with MCL'S.

Locational Running Annual Average (LRAA): Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

DRINKING WATER ANALYSIS
For 2018 Calendar Year

Organic Chemistry - Primary Regulated Parameters

Contaminant/Substance	Date Tested	Unit	Result			MCL	MCLG	Typical Source	Violation
Arsenic	2/28/2017	ppb	2.2			10	0	Erosion of natural deposits	NO
Barium	2/28/2017	ppm	0.036			2	2	Erosion of natural deposits	NO
Chromium	2/28/2017	ppb	1			100	100	Erosion of natural deposits	NO
Fluoride	2/28/2017	ppm	0.24			4	4	Erosion of natural Deposits/Dental additive	NO
Selenium	2/28/2017	ppb	6.9			50	50	Erosion of natural deposits	NO
Nitrate (N)	3/19/2018	ppm	2.8			10	10	Runoff from fertilizer use, leaching from septic tanks	NO

90th Percentile Lead and Copper

Substance	Period	90th Percentile		Range	Unit	Sites over AL	Max AL	Typical Source	Violation
Lead	2015-2017	11		1-17	ppb	1	15	Corrosion of household plumbing	NO
Copper	2015-2017	0.32		.022-.32	ppm	0	1.3	Corrosion of household plumbing	NO

** Copper and lead-contaminant levels are measured at the tap. 90% of the tests in a water system must equal or be below the action level

AL- Action Level at the tap. Systems consistently meeting the action levels can reduce monitoring to one per year and then every three years

Inorganic Chemistry-Secondary Parameters

Substance	Date Tested	Unit	Result	Range L-H		SMCL		Typical Source	
Calcium	2/28/2017	MG/L	190	190		200		Erosion of natural deposits	
Magnesium	2/28/2017	MG/L	49	49		150		Erosion of natural deposits	
Sodium	2/28/2017	MG/L	44	44		100		Erosion of natural deposits	
Potassium	2/28/2017	MG/L	3.4	3.4		100		Erosion of natural deposits	
Chloride	2/28/2017	MG/L	53	53		250		Erosion of natural deposits	
Sulfate	2/28/2017	MG/L	370	370		250		Erosion of natural deposits	
Total Hardness	2/28/2017	MG/L	670	670		400		Erosion of natural deposits	
Alkalinity	2/28/2017	MG/L	300	300		300		Erosion of natural deposits	
PH	2/28/2017	PH	7.6	7.6		6.5-8.5		Erosion of natural deposits	
Specific Conductivity	2/28/2017	umho/cm	1400.00	1400.00		1500		Erosion of natural deposits	
Total Dissolved Solids	2/28/2017	MG/L	930	930		500		Erosion of natural deposits	
Total Phosphorus	2/28/2017	MG/L	0.096	0.096		5		Erosion of natural deposits	
Silica	2/28/2017	MG/L	24	24		50		Erosion of natural deposits	
Corrosivity	2/28/2017	Lang	0.73	0.73		0-+1		Erosion of natural deposits	
Zink	2/28/2017	MG/L	0.016	0.016		5		Erosion of natural deposits	

Microbiological Contaminants

Substance	Date Tested	Unit	Result			MCL	MCLG	Typical Source	Violation
Total Coliforms*	2018	Positive Sample	None			0	None	Human and animal fecal waste	NO

*Total Coli forms - Two samples are collected throughout the system each month and analyzed for Total Coli forms. No sample may be positive for fecal coliform. Samples that are positive for Total Coli forms must be resample from the original site along with 2 additional samples collected within 24 hours and re tested.

Disinfection By-Products Testing

Substance	Date Tested	RAA	Range	Unit		MCL	MCGL		Violation
HAA5	2018	13	13	ppb		60	0	Byproduct of disinfection	
TTHMs	2018	8	8.2	ppb		80	0	Byproduct of disinfection	NO

These tests are performed to monitor the various levels of by products from the disinfection process. This became necessary after the 1988 Stage 1 Disinfectant Rule became effective. The results of these test allow system operators to keep disinfection by products in check.

Radio Chemistry

Parameter	Date Tested	Unit	Result			MCL	MCLG	Typical Source	Violation
Combined Radium	6/10/2014	pci/L	1.7			5	0	Erosion of natural deposits	NO