2018 ANNUAL DRINKING WATER QUALITY REPORT

(Consumer Confidence Report) City of Everman, Texas ID# TX2200010

Phone No. (817) 293-0525

Special Notes

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

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 are 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 two 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.

Water Sources: The sources of drinking (both tap water and bottle water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material and can pick up substance resulting from the presence of contaminants that may be present in source.

- 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 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 naturallyoccurring or be the result of oil and gas production and mining activities.

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 Agency (EPA) required test and is presented in the attached pages. The Texas Commission on Environmental Quality (TCEQ) completed an assessment of your source water and results indicate that some of your source points are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. For more information on source water assessments and protection efforts at our system contact the City of Everman Public Works Department at (817) 293-0525.

Where do we get our drinking water?

The source of drinking water used by City of Everman is obtained from Ground Water. It comes from the Paluxy and Twin Mountains Aquifers. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: https://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/DWW/

Public Participation Opportunities

Date: Monday through Friday Time: 8:00 am to 5:00 p.m.

Location: Everman City Hall, 212 North Race St. Phone No:

(817) 293-0525

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (817) 293-0525.

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. 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 regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

About the Following Pages

The pages that follow list all the federally regulated or monitored constituents, which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents.

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 EPA. These constituents are not cause for health concerns. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Microorganism Testing

TRWD monitors the raw water at all intake sites for Cryptosporidium, Giardia Lambia and viruses. The source is human and animal fecal waste in the watershed.

No viruses were detected, but Cryptosporidium and Giardia Lamblia, microbial parasites common in surface water, were detected at very low levels.

The Cryptosporidium testing methods cannot determine if the parasite is dead and inactive or alive and capable of causing cryptosporidiosis. This is an abdominal infection that causes nausea, diarrhea and abdominal cramps after ingestion. The drinking water treatment process is designed to remove Cryptosporidium and Giardia Lambia through filtration.

DEFINITIONS / Abbreviations:

Action Level (AL) - The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a Action Level Goal (ALG) — The level 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.

<u>Level 1 Assessment</u> – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria were found.

<u>Level 2 Assessment</u> – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *Escherichia coli (E. coli)* maximum contaminant level (MCL) violation has occurred and/or why total coliform bacteria were found on multiple occasions.

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 contaminants. Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to maximum contaminant level goals 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 risk to health. MCLGs allow for a margin of safety.

<u>Maximum Residual Disinfectant Level (MRDL)</u> - 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.

MFL - million fibers per liter (a measure of asbestos)

Mrem - millirems per year (a measure or radiation absorbed by the body)

N/A – not applicable

NTU - nephelometric turbidity units (a measure of turbidity)

<u>pCi/L</u> - picocuries per liter (measurement 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 quadrillion, or picograms per liter (pg/L)

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

<u>Treatment Technique (TT)</u> - A required process intended to reduce the level of a contaminant in drinking water. water system must follow.

Regulated Contaminants

These substances are regulated or are required to be monitored in drinking water. None of the detected substances exceeded the regulated limits in 2018 or the analysis which was most recently performed under reduced sampling requirements for substances unlikely to exceed limits.

Year or Range	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
2016	Arsenic	0.71	0 – 0.71	0	10	ppb	N	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
2018	Atrazine	0.1	0 – 0.1	3	3	ppb	N	Runoff from herbicides used on row crops
2016	Barium	0.016	0.0027 – 0.016	2	2	ppm	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2017	Beta particles & photon emitters	5.6	4.4 – 5.6	0	50	pCi/L	N	Decay of natural and man-made deposits
2018	Bromate	3	0 – 10.7	0	10	ppb	N	Byproduct of drinking water disinfection
2016	Chromium	5.9	4.6 – 5.9	100	100	ppb	N	Discharge from steel and pulp mills, erosion of natural deposits
2017	Combined Radium 226/228	2.5	2.5 – 2.5	0	5	pCi/L	N	Erosion of natural deposits
2018	Cyanide	84.3	0 – 84.3	200	200	ppb	N	Discharge from plastic and fertilizer factories; discharge from steel and metal factories
2018	Fluoride	0.6	0.174 0.612	4	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2018	Haloacetic Acids (HAA5)	9	1.6 – 14	No goal for Total	60	ppb	N	Byproduct of drinking water disinfection
2018	Nitrate (measured as Nitrogen)	1	0.168 – 0.669	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2017	Nitrite (measured as Nitrogen)	0.03	0.01 - 0.03	1	1	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2016	Selenium	1.8	1.3 – 1.8	50	50	ppb	N	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
2018	Total Trihalomethanes (TThm)	11	0 – 20.1	No goal for total	80	ppb	N	By-product of drinking water disinfection

Maximum Residual Disinfectant Level

Year	Disinfectant	MRDL	MRDLG	Level	Range	Units	Violation	Likely Source of Contaminant
2018	Chloramines	4	4	4	3.6 – 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 Contaminant
0	0 positive monthly sample.	0		0	N	Naturally present in the environment as well as feces

Turbidity

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, diarrhea and associated headaches. Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Year	Contaminant	Measure	MCL	Level	Lowest Monthly % of samples ≤ 0.3 NTU	MCLG	Violation	Likely Source of Contaminant
2018	Turbidity	NTU	TT = 1	0.49	99.8%	N/A	N	Soil runoff (Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

Total Organic Carbon

Total Organic Carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection by products.

Disinfection is necessary to ensure that the water does not have unacceptable levels of pathogens.

Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAAs) which are reported elsewhere in this report.

Year	Contaminant	High	Low	Average	MCL	MCLG	Violation	Likely Source of Contamination
2018	Total Organic Carbon	1	1	1	TT = % removal	N/A	N	Naturally occurring

Secondary Constituents

Year	Contaminant	Unit	Range		
2018	Bicarbonate	ppm	108 – 144		
2018	Calcium	ppm	42 52.1		
2018	Chloride	ppm	11.8 – 40		
2018	Conductivity	µmhos/cm	302 - 471		
2018	pH	units	8.6 - 8.7		
2018	Magnesium	ppm	3.2 - 8.64		
2018	Sodium	ppm	14.8 - 30.3		
2018	Sulfate	ppm	26.3 - 36.5		
2018	Total Alkalinity as CaCO₃	ppm	98.2 – 136		
2018	Total Dissolved Solids	ppm	156 – 2251		
2018	Total Hardness as CaCO ₃	ppm	118 – 162		
2018	Total Hardness in Grains	grains / gallon	7 – 9		

Unregulated Contaminants

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.

Year	Contaminant	Unit	Range of Levels Detected	Level	MRDL	MRDLG	Likely Source of Contamination	
2018	Chloral Hydrate	ppb	0.12 - 0.34	.34	Not regulated	0	By-product of drinking water disinfection	
2018	Bromoform	ppb	0 – 5.15	5.15	Not regulated	0		
2018	Bromodichloromethane	ppb	1.99 – 7.08	7.08	Not regulated	0	By-products of drinking water disinfection; not regulated individually; included in Total Trihalomethanes	
2018	Chloroform	ppb	2.43 – 8.40	8.4	Not regulated	0.07	1 maiometraries	

2018	Dibromochloromethane	ppb	1.31 – 6.94	6.94	Not regulated	0.06	
2018	Monochloracetic Acid	ppb	1.5 - 3.9	3.9	Not regulated	0.07	
2018	Dichloroacetic Acid	ppb	1 – 4.3	8.5	Not regulated	0	Du zandunta of drinking water disinfection:
2018	Trichloroacetic Acid	ppb	0-2.2	2.2	Not regulated	0.02	By-products of drinking water disinfection; not regulated individually; included in Haloacetic Acids
2018	Monobromoacetic Acid	ppb	1.5 – 3.9	2.3	Not regulated	N/A	
2018	Dibromoacetic Acid	ppb	1 – 4.3	4.3	Not regulated	N/A	

Violations Table

LEAD and COPPER RULE: The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2016	08/15/2017	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.
PUBLIC NOTICE RULE LINKED TO VIOLATION	12/09/2016	03/03/2017	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

City of Everman Water Loss for 2018

For the calendar year 2018, our system lost an estimated 22,883,062 gallons of water per the audit submitted to the Texas Water Development Board. If you have any question about the water loss audit please call (817) 293-0525.