

2016 Annual Drinking Water Quality Report

(Consumer Confidence Report – January 1, 2016 to December 31, 2016)

for

Emerald Bay Municipal Utility District

Phone Number: (903) 825-6960

Our Drinking Water is Regulated

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. We hope this information helps you become more knowledgeable about what's in your drinking water. For more information about this report, please contact Bill Harris at the Emerald Bay Municipal Utility District Office **(903) 825-6960**.

Our drinking water is GROUND WATER extracted from the Carrizo/Wilcox Aquifer

Public Participation Opportunities

The District Board of Directors holds regularly scheduled board meetings on a quarterly basis at the District Office, 155 La Salle Drive, Bullard, TX 75757. To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us at: **(903) 825-6960**.

En Español

Este informe incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono **(903) 825-6960** – Para hablar con una persona bilingüe en español.

Source 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 materials, and can pick up substances resulting from the presence of animals or from human activity.

ALL drinking water may contain contaminants

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of some 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).

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, 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, and 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.

In order to ensure that tap water is safe to drink, the 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 to public health.

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, color, or odor of drinking water, please call the Emerald Bay Municipal Utility District office at: (903) 825-6960.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immune-compromised 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 (1-800-426-4791).

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 supplying 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 your exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. The 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 on source water protection strategies. Further details about sources and source-water assessments are available at the following URL: <http://dww.tceq.state.tx.us/DWW/>.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>.

Source Water Name	Type of Water	Report Status	Location
1-14040 CR 188/Bullard, TX	Ground Water	Active	Carrizo/Wilcox Aquifer
1-13951 CR 1106/Flint, TX	Ground Water	Active	Carrizo/Wilcox Aquifer
1-21343 CR 178/Flint, TX	Ground Water	Active	Carrizo/Wilcox Aquifer

Definitions and Abbreviations

Maximum Contaminant Level Goal or MCLG: The level of contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

Maximum Contaminant Level or MCL: The highest permissible level of contaminant in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level Goal or MRDLG: The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

Maximum Residual Disinfectant Level or 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.

Action Level Goal or AGL: The level of contamination in drinking water below which there is no known or expected risk to health. ALGs are a margin of safety.

Action Level or AL: The concentration of a contaminant, which exceeded, triggers treatment or other requirements which a water system must follow.

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

Avg: Regulatory compliance with some MCL's are based on running average of monthly samples.

ppm: Milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

ppb: Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons.

Na: Not Applicable.

NTU – Nephelometric Turbidity Units (a measure of turbidity)

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

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

ppt – parts per trillion, or nanograms per liter

ppq – parts per quadrillion, or pictograms per liter

Regulated Contaminants

Disinfectants and Disinfection Byproducts:

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contaminant
2014	Haloacetic Acids (HAA5)	2	2-2	No Goal for the Total	60	ppb	NO	Byproduct of drinking water disinfection
2016	Total Trihalomethanes (TTHM)	6	6.27-6.27	No Goal for the Total	80	ppb	NO	Byproduct of drinking water disinfection

Inorganic Contaminants:

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contaminant
2016	Barium	0.039	0.039-0.039	2	2	ppm	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2016	Fluoride	0.164	0.164-0.164	4	4.0	ppm	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2016	Nitrate (Measured as Nitrogen)	0.0135	0.0135-0.0135	10	10	ppm	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
12/19/13	Chromium	1.58	1.58-1.58	100	100	ppb	NO	Discharge from steel and pulp mills; Erosion of Natural deposits
9/15/14	Cyanide	6.83	6.83-6.83	200	200	ppb	NO	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.

Radioactive Contaminants:

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit of Measure	Violation	Likely Source of Contaminant
12/19/13	Combined Radium 226 & 228	1	1-1	0	5	pCi/L	NO	Erosion of Natural Deposits

Maximum Residual Disinfectant Level:

Collection Date	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2016	Chlorine Residual, Free	1.33	.28	2.27	4	4	ppm	Chlorine Gas

Coliform Bacteria:

MCL Goal	Total Cloiform MCL	Highest No. of Positive	Fecal Coliform or E. Coli MCL	Total No. of Fecal Coliform or E. Coli Samples	Violation	Likely Source of Contamination
0	No Positive Monthly Sample	No Sample Was Positive	0	0	NO	Naturally Present in the Environment

Lead and Copper:

Collection Date	Contaminant	MCLG	Action Level	The 90 th Percentile	No. of Sites Over Action Level	Unit of Measure	Violation	Likely Source of Contaminant
7/3/14	Lead	0	15	1.1	0	ppb	NO	Corrosion of household plumbing systems; erosion of natural deposits.
7/3/14	Copper	1.3	1.3	.062	0	ppm	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Violation 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 corrosively. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Lead Consumer Notice (LCR)	12/30/2014	03/02/2015	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

Fecal Coliform:

REPORTED MONTHLY TESTS FOUND **NO FECAL COLIFORM BACTERIA** FOR YEAR 2016