

# 2011 Annual Drinking Water Quality Report

(Consumer Confidence Report)

for

## Emerald Bay Municipal Utility District

Phone Number: (903) 825-6960

### Special Notice

#### ***Required language for ALL community public water supplies:***

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).

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### **Public Participation Opportunities**

The District Board of Directors holds regularly scheduled monthly board meetings on the 3<sup>rd</sup> Monday of each month at 05:30 PM 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**.

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### **Our Drinking Water is Regulated**

This report is a summary of the quality of water we provide to our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required test and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

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### **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.

### ***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.

### ***En Español***

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (903) 825-6960 – Para hablar con una persona bilingue en español.

### ***Where do we get our drinking water?***

The source of drinking water used by The Emerald Bay Municipal Utility District is Ground Water. A Sources 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 on our source water protection strategies. Some of the source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW>. For more information on source water assessments and protection efforts at our system, please contact us.

### ***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 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).

### ***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, and not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but may greatly affect the appearance and taste of your water.

## Required 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>.

### **ABBREVIATIONS**

- NTU** – Nephelometric Turbidity Units
- MFL** – 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)
- ppb** – parts per billion, or micrograms per liter (ug/L)
- ppt** – parts per trillion, or nanograms per liter
- ppg** – parts per quadrillion, or pictograms per liter

### **DEFINITIONS**

**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.

**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.

## Regulated Contaminants

### Disinfectants and Disinfection Byproducts:

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2009	Total Haloacetic Acids	2.7	2.7	2.7	60	ppb	Byproduct of drinking water disinfection
2009	Total Trihalomethanes	13	13	13	80	ppb	Byproduct of drinking water disinfection

### Inorganic Contaminants:

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2011	Barium	0.033	0.033	0.033	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2011	Fluoride	0.2	0.2	0.2	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2011	Combined Radium 226 & 228	1	1	1	5	0	pCi/L	Erosion of natural deposits.
2007	Cross Beta Emitters	5.6	5.6	5.6	50	0	pCi/L	Decay of natural and man-made deposits.
2011	Chromium	.457	.457	.457	100	100	ppb	Discharge from steel and pulp mills; Erosion of Natural deposits.
2011	Thallium	.046	.046	.046	2	.5	ppb	Discharge from electronics, glass, and leaching from ore-processing sites, drug factories.

### Maximum Residual Disinfectant Level:

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2010	Chlorine Residual, Free	1.38	.98	1.73	4	4	ppm	Chlorine Gas

### Organic Contaminants:

TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

### Unregulated Initial Distribution System Evaluation for Disinfection Byproducts:

WAIVED, OR NOT YET SAMPLED

### Turbidity:

NOT REQUIRED

### 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	1 Positive Monthly Sample	2 Samples Were Positive	0	0	Y	Naturally Present in the Enviorment

### Total Coliform:

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MCL (TRC), Monthly	05/01/2011	05/31/2011	Total coliform bacteria were found in our drinking water during the period indicated in enough samples to violate a standard.

### Fecal Coliform:

REPORTED MONTHLY TESTS FOUND **NO FECAL COLIFORM BACTERIA** FOR YEAR 2011

### Unregulated Contaminants:

Bromoform, chloroform, dichlorobromomethane, dibromochloromethane are disinfectant byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2007	Chloroform	2.68	2.68	2.68	ppb	Byproduct of drinking water disinfection
2007	Bromodichloromethane	2.87	2.87	2.87	ppb	Byproduct of drinking water disinfection
2007	Dibromochloromethane	2.33	2.33	2.33	ppb	Byproduct of drinking water disinfection

### Lead and Copper:

Year	Contaminant	MCLG	Action Level	The 90 <sup>th</sup> Percentile	No. of Sites Over Action Level	Unit of Measure	Source of Contaminant
2011	Lead	0	15	1.66	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2011	Copper	1.3	1.3	.0411	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

### Secondary and Other Constituents Not Regulated:

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2007	Aluminum	0.008	0.008	0.008	.050	ppm	Abundant naturally occurring element.

2007	Bicarbonate	104	104	104	NA	ppm	Corrosion of carbonate rocks such as limestone.
2007	Calcium	3	3	3	NA	ppm	Abundant naturally occurring element.
2007	Chloride	10	10	10	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2007	Copper	0.003	0.003	0.003	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives .
2007	Hardness as Ca/Mg	11	11	11	NA	ppm	Naturally occurring calcium and magnesium.
2007	Magnesium	0.8	0.8	0.8	NA	ppm	Abundant naturally occurring element.
2007	Manganese	0.0013	0.0013	0.0013	.05	ppm	Abundant naturally occurring element.
2007	pH	7.7	7.7	7.7	>7.0	units	Measure of corrosivity of water.
2007	Sodium	58	58	58	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2007	Sulfate	13	13	13	300	ppm	Naturally occurring ; common industrial; byproduct of oil field activity.
2007	Total Alkalinity as CaCO <sub>3</sub>	104	104	104	NA	ppm	Naturally occurring soluble mineral salts.
2007	Total Dissolved Solids	142	142	142	1000	ppm	Total dissolved mineral constituents in water.
2007	Zinc	0.118	0.118	0.118	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.