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ENNIS, TEXAS  
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PERMIT NO. 135

2011 WATER QUALITY REPORT  
City of Ennis  
P.O. Box 220  
Ennis, TX 75120

# 2011<sup>1</sup> Drinking Water Quality Report (CONSUMER CONFIDENCE REPORT)



## The City of Ennis

115 W. Brown Street  
Ennis, Texas 75119  
(972) 875-1234

<http://www.ennis-texas.com>  
0700001

<sup>1</sup>Data compiled from 2010 water samples.

### 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 immunocompromised 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 at (800) 426-4791."

### Public Participation Opportunities

**Date:** August 11, 2011

**Time:** 10 am

**Location:** City Hall

**Phone No:** 972-875-1234

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

### Our Drinking Water is Regulated

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 Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

### 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 material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- 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.
- 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.
- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 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. 972-875-1234 para hablar con una persona bilingüe en español.

**Where do we get our drinking water?** The source of the drinking water used by the City of Ennis is surface water from Lake Bardwell. A Source Water Susceptibility Assessment for your drinking water sources 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. Some of this source water assessment information is available 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 benefits to purchasing bottled water or point of use devices. 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 (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, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

### Definitions:

The following tables contain scientific terms and measures, some of which may require explanation.

#### 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 Contaminant Level** or 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 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.

#### 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.

**Avg:** Regulatory compliance with some MCLs are based on running annual 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 of water.

**na:** not applicable.

### 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
- ppt - parts per trillion, or nanograms per liter
- ppq - parts per quadrillion, or picograms per liter

**2010 Regulated Contaminants Detected**

**Lead and Copper**

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	# of Sites over AL	Units	Violation	Likely Source of Contamination
Copper	2010	1.3	1.3	0.402	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2010	0	1.5	1.79	0	ppb	N	Corrosion of household plumbing systems, Erosion of natural deposits.

*"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 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 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>"*

Disinfectants and Disinfectant By Products	Collection Date	Highest Level Detected	Range of Levels detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2010	22	14.2-26.9	No goal for the total	60	ppb	N	By-product of drinking water chlorination
Total Trihalomethanes	2010	45	42.4-49.4	No goal for the total	80	ppb	N	By-product of drinking water chlorination

**Maximum Residual Disinfectant Level**

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfection type, minimum, maximum, and average level.

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2010	Disinfectant Used	Average level of 2010 quarterly averages	Minimum result of single sample	Maximum result of single sample				Disinfectant used to control microbes
	Chloramines	3.8	2.3	4.2	4.0	< 4.0	ppm	

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride	2010	0.62	0.62-0.62	4	4.0	ppm	N	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer
Nitrate (Measured as Nitrogen)	2010	0.64	0.64-0.64	10	10	ppm	N	Runoff from fertilizer use, leaching from septic tanks, sewage erosion of natural deposits

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/Photon Emitters	02/23/2005	5.1 pci/L	5.1-5.1	0	4.0	mrem/yr	N	Decay of natural and man – made deposits

Synthetic Organic Contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Pentachlorophenol	2010	0.14	0-0.14	0	1	ppb	N	Discharge from wood preserving factories

**Turbidity**

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.94	N	Soil Runoff
Lowest monthly meeting limit	0.3 NTU	99.23%	N	Soil Runoff

**Total Organic Carbon (TOC)**

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Minimum Level	Average Level	Maximum Level	Units of Measure	Source of Contaminant
2010	Source Water	3.71	4.10	4.99	PPM	Naturally present in the environment
2010	Drinking Water	2.16	2.60	2.98	PPM	Naturally present in the environment
2010	Removal Ratio	1.01	1.53	2.44	%Removal*	NA

\*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

**Total Coliform** Reported monthly tests found no coliform bacteria

**Fecal Coliform** Reported monthly tests found no fecal coliform bacteria

**Secondary and Other Constituents Not Regulated (No associated adverse health effects)**

Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2010	Bicarbonate	140	140	140	NA	ppm	Corrosion of carbonate rocks such as limestone.
2010	Chloride	16.3	16.3	16.3	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2010	Hardness as Ca/Mg	94	94	94	NA	ppm	Naturally occurring calcium and magnesium.
2010	pH	8.0	8.0	8.0	>7.0	units	Measure of corrosivity of water.
2010	Sulfate	34.8	34.8	34.8	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2010	Total Alkalinity as CaCO <sub>3</sub>	140	140	140	NA	ppm	Naturally occurring soluble mineral salts.
2010	Total Dissolved Solids	270	270	270	1000	ppm	Total dissolved mineral constituents in water.