

2009

Drinking Water Quality Report

(CONSUMER CONFIDENCE REPORT)



The City of Ennis

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

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 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.

WHERE DO WE GET OUR DRINKING WATER?

Our drinking water is obtained from Surface water sources. It comes from the following; Lake Bardwell. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe 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 will allow us to focus our source water protection strategies. 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 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).

EN ESPAÑOL

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. 972-875-1234 para hablar con una persona bilingüe en español.

WATER SOURCES

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: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

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.

SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, PEOPLE WITH HIV/AIDS OR OTHER IMMUNE PROBLEMS:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons 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. The EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

PUBLIC PARTICIPATION OPPORTUNITIES

Date: August 13, 2009

Time: 5:00 pm

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.

DEFINITIONS

Maximum Contaminant Level (MCL) - The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs 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 health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (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.

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 contamination.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

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

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 (µg/L)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

ABOUT THE FOLLOWING PAGES

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

¹Data compiled from 2008 water sampling.

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	Fluoride	0.66	0.66	0.66	4	4	ppm	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
2008	Nitrate	0.20	0.20	0.20	10	10	ppm	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
2005	Gross beta emitters	3.9	3.9	3.9	50	0	pCi/L	Decay of natural and man – made deposits

Organic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	Atrazine	0.15	0.15	0.15	3	3	ppb	Runoff from herbicide used on row crops

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
2008	Disinfectant Used	Average level of 2008 quarterly averages	Minimum result of single sample	Maximum result of single sample				Disinfectant used to control microbes
	Chloramines	3.01	2.4	4.0	4.0	< 4.0	ppm	

Disinfection Byproducts

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2008	Total Haloacetic Acids	22.73	17.7	23.5	60	ppb	Byproduct of drinking water disinfection
2008	Total Trihalomethanes	48.33	35.9	54.6	80	ppb	Byproduct of drinking water disinfection

Initial Distribution System Evaluation (IDSE) Reporting

"This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acids in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA requires the data to be reported here. Please contact your water system representative if you have any questions."

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of measure
2008	Total Haloacetic Acids	21.8	12.4	32.6	NA	ppb
2008	Total Trihalomethanes	42.7	30.1	57.9	NA	ppb

Unregulated Contaminants

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

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2008	Chloroform	15.4	15.4	15.4	ppb	Byproduct of drinking water disinfection
2008	Bromoform	1.15	1.15	1.15	ppb	Byproduct of drinking water disinfection
2008	Bromodichloromethane	17.2	17.2	17.2	ppb	Byproduct of drinking water disinfection
2008	Dibromochloromethane	9.9	9.9	9.9	ppb	Byproduct of drinking water disinfection

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2007	Lead	2.9	1	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits
2007	Copper	0.588	0	1.3	ppm	Corrosion of household plumbing systems, corrosion of natural deposits, leaching from wood preservatives.

"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>."

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.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limit	Turbidity Limits	Unit of Measure	Source of Contaminant
2008	Turbidity	0.08	100	0.3	NTU	Soil runoff

Total Organic Carbon (TOC)

Total organic carbon (TOC) has 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
2008	Source Water	3.61	12.07	78.90	PPM	Naturally present in the environment
2008	Drinking Water	2.24	2.69	3.03	PPM	Naturally present in the environment
2008	Removal Ratio	1.01	1.63	3.00	%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.

Untreated Water: During 2008, one of nine untreated water samples indicated the low level presence of cryptosporidium in untreated lake water at Lake Bardwell. The subject sample result was NOT from the treated Public Water Supply System of the City of Ennis; was not used for compliance; and may have been collected under non-standard conditions. Cryptosporidium is a microscopic organism common in untreated lake or other surface water. The source of cryptosporidium is animal and/or human fecal waste. If ingested, cryptosporidium may cause cryptosporidiosis, an abdominal infection (symptoms include nausea, diarrhea, and abdominal cramps). Required levels of inactivation are achieved through disinfection and filtration. Although the City of Ennis water treatment process removes cryptosporidium, immune-compromised persons should consult their doctors regarding appropriate precautions to take to avoid infection. To request more information on cryptosporidium, please call the U.S. EPA's Safe Drinking Water Hotline (1/800/426/4791). Cryptosporidium has NEVER been detected in the treated Public Water Supply System of the City of Ennis.

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
2008	Bicarbonate	99	99	99	NA	ppm	Corrosion of carbonate rocks such as limestone.
2008	Chloride	18.1	18.1	18.1	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2008	Hardness as Ca/Mg	125	125	125	NA	ppm	Naturally occurring calcium and magnesium.
2008	pH	7.87	7.87	7.87	>7.0	units	Measure of corrosivity of water.
2008	Sulfate	49.5	49.5	49.5	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2008	Total Alkalinity as CaCO3	99	99	99	NA	ppm	Naturally occurring soluble mineral salts.
2008	Total Dissolved Solids	235	235	235	1000	ppm	Total dissolved mineral constituents in water.