

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

The City of Victoria's water system has been given a "Superior" rating by the Texas Commission on Environmental Quality. This means that it either meets or exceeds all State and Federal water quality standards and that there is ample supply, storage, and pumping facilities to meet the citizens' needs.

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 is in your drinking water.

### **Drinking 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 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:

- 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 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.

### **Public Participation Opportunities**

You are invited to comment on this information during the Citizen Communication portion of any regularly scheduled City Council meeting. These meetings are held at 5:00 p.m. on the first and third Tuesdays of each month in the City Council Chambers, 107 W. Juan Linn Street, Victoria, Texas. To learn about future public meetings (concerning your drinking water), or to request one, please call us at (361) 485-3381.

### **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 for 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.

## Where Do We Get Our Drinking Water?

The City of Victoria's primary source is 20,000 acre feet of surface water from the Guadalupe River. This is about two times the amount of water that the City currently uses. This water is made available through a permit issued by the Texas Commission on Environmental Quality, (TCEQ). Because there are environmental restrictions placed on this permit and because there are senior water rights downstream of the City, there may be times during extreme drought situations when the City could not get all of the water that it needs from this source.

Therefore, in addition to the Guadalupe River water, the City has off-channel reservoirs holding 10,000 acre feet of water located on 640 acres of incorporated land. This water is a mixture of groundwater from a shallow aquifer and Guadalupe River water that the City has pumped into these reservoirs. These reservoirs store approximately one year's supply of water for the City.

Lastly, the City of Victoria has retained the ability to use 10 of its 15 water wells for extreme emergencies and for peak demand periods. These wells are drilled into the Gulf Coast Aquifer and prior to 2001 they supplied all of the water for the City's residents.

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 sources based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies. Some of this 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 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 1 - (800) 426-4791.

## 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. Although some of these components were detected in your water, none of them exceeded the MCL. The EPA and the TCEQ mandate that each community water system provide its customers with an annual Consumer Confidence Report. Much of the language contained in this report is required.

## En Español

Este informe incluye la información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (361) 485-3381 par hablar con una persona bilingüe en español.

## Abbreviations

**NTU** - Nephelometric Turbidity Units.

**ppb** - parts per billion, or micrograms per liter (ug/l)

**ppm** - parts per million, or milligrams per liter (mg/L)

**pCi/L** - Picocuries per liter (a measure of radioactivity)

## Definitions Used in This Report

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is not a known or expected health risk. MCLGs allow for a margin of safety.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of 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 contaminants.

**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 (AL):** The concentration 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.

**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.

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

## 2010 Regulated Contaminants Detected

### Total Coliform

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

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 Contamination Violation
0	5 % of monthly samples are positive.	3.6	0	0	N	Naturally present in the environment.

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

### Maximum Residual Disinfectant Level

Disinfectant Type	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit Of Measure	Source of Chemical
Total Chlorine	2.5	0.5	4.1	4	4	ppm	Disinfectant used to control microbes

## Lead and Copper

	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# of Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	8/15/2008	0	15.0	1.0	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits
Copper	8/15/2008	1.3	1.3	0.221	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

### 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. The City of Victoria 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>.

## Regulated Contaminants

### Disinfectants and Disinfection By-Products

	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Unit	Violation	Source of Constituent
Haloacetic Acids (HAA5)	2010	31	22.3 - 33.2	No goal for the total	60	ppb	N	By-product of drinking water chlorination.
Total Trihalomethanes (TTHm)	2010	55	50.6 - 58.6	No goal for the total	80	ppb	N	By-product of drinking water chlorination.

### Inorganic Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	7/25/2005	0.0585	0.0585 - 0.0585	2	2	ppm	N	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Fluoride	2010	0.61	0.61 - 0.61	4	4	ppm	N	Erosion of natural deposits; water additive to promote strong teeth; discharge from fertilizer and aluminum factories
Nitrate (Measured as Nitrogen)	2010	0.34	0.34 - 0.34	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks sewage; erosion of natural deposits

## Radioactive Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Gross Beta Emitters	2/8/2005	5.1	5.1 - 5.1	0	50	pCi/L	N	Decay of Natural and man-made deposits.

## 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.

	Limit(Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest Single Measurement	1 NTU	0.24 NTU	N	Soil Runoff
Low est Monthly % Meeting Limit	0.3 NTU	100%	N	Soil Runoff

## Total Organic Carbon (TOC)

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 water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in the report.

Year	Contaminant	Average	Minimum	Maximum	Unit of	Source of Contaminant
		Level	Level	Level	Measure	
2010	Source Water	2.39	1.0	3.9	ppm	Naturally present in the environment
2010	Drinking Water	1.4	1.0	2.2	ppm	Naturally present in the environment
2010	Removal Ratio	42.69	0	61.5	%*	N/A

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

## Cryptosporidium Monitoring Information

As required by the TCEQ, we have conducted Cryptosporidium monitoring. Cryptosporidium is a microbial parasite that may be commonly found in surface water. Cryptosporidium may come from animal and human feces in the watershed. **Our monitoring resulted in no Cryptosporidium being detected. No additional monitoring or treatment is required.**

## Organic Contaminants

Testing waived, not reported or none detected.

## Unregulated Initial Distribution System Evaluation for Disinfection Byproducts

Waived or not yet sampled.

## Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane and dibromochloromethane are disinfectant 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
2010	Chloroform	11.8	4.7	15.3	ppb	By-product of drinking water disinfection
2010	Bromoform	4.33	2.3	9.5	ppb	By-product of drinking water disinfection
2010	Bromodichloromethane	19.7	13.8	21.4	ppb	By-product of drinking water disinfection
2010	Dibromochloromethane	20.3	17.9	22.6	ppb	By-product of drinking water disinfection

## Secondary and other Constituents Not Regulated

(No associated adverse health effects)

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, or 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 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.

Year	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2005	Aluminum	0.041	0.041	0.041	0.05	ppm	Abundant naturally occurring element
2010	Bicarbonate	193	193	193	NA	ppm	Corrosion of carbonate rocks such as limestone
2005	Calcium	43.3	43.3	43.3	NA	ppm	Abundant naturally occurring element
2010	Chloride	65.8	65.8	65.8	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2008	Copper	0.156	0.056	0.708	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2008	Hardness as Ca/Mg	209	209	209	NA	ppm	Naturally occurring calcium and magnesium
2005	Magnesium	15.9	15.9	15.9	NA	ppm	Abundant naturally occurring element
2005	Manganese	0.0013	0.0013	0.0013	0.05	ppm	Abundant naturally occurring element
2005	Nickel	0.002	0.002	0.002	NA	ppm	Erosion of natural deposits
2010	pH	7.9	7.9	7.9	>7.0	units	Measure of corrosivity of water
2010	Sodium	84.5	84.5	84.5	NA	ppm	Erosion of natural deposits; byproduct of oil field activity
2010	Sulfate	11.9	11.9	11.9	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity
2010	Total Alkalinity as CaCO <sub>3</sub>	193	193	193	NA	ppm	Naturally occurring soluble mineral salts
2010	Total Dissolved Solids	345	345	345	1000	ppm	Total dissolved mineral constituents in water
2005	Zinc	0.015	0.015	0.015	5	ppm	Moderately abundant naturally occurring element; used in the metal industry