

# CITY OF FRIENDSWOOD 2010 CONSUMER CONFIDENCE REPORT

## 2010 Drinking Water Quality Report for the City of Friendswood Phone Number 281-996-3382

City of Friendswood

### Public Works Building

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*En Espanol: Este informe incluye informacion importante sobre el agua potable.  
Si tiene preguntas o comentarios sobre este informe en español, favor de llamar  
at tel. (281) 996-3380 – para hablar con una persona bilingue en español.*

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4762 Oakmont Ct  
League City, TX 77573

## Your Drinking Water Is Safe!

### The Consumer Confidence Report (CCR) Regulations

were published by the U.S. Environmental Protection Agency (USEPA) on August 19, 1998 and became effective on September 19, 1998. All community water systems are required to deliver their CCR annually by July 1. CCRs are the centerpiece of the public's "right to know" required by the 1996 State Drinking Water Act amendments and must include information on the water source, information on regulated and unregulated contaminants found in drinking water, special health effects language provided by the EPA and information on drinking water violations.

## Sources 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 activities. Contaminants that may be present in the 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 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.

## Where Do We Get Our Drinking Water?

Our drinking water is purchased from the City of Houston. Our surface water plant receives its raw water from Lake Livingston and the Trinity River. In addition, we can supply ground water utilizing six water wells drawing their water from the Gulf Coast Aquifer at a depth of six hundred feet or deeper. A source Water Susceptibility Assessment for your drinking water sources is currently being updated by TCEQ. 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 our 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.

## Our Drinking Water is Regulated

This report is a summary of the quality of 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.

## 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency'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 concerns. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

## Water Conservation Plan

In addition to a drought contingency plan, the City of Friendswood has adopted a water conservation plan in order to conserve the available water supply and protect the integrity of water supply facilities with particular regard for domestic water use, sanitation, fire protection, and also to protect and preserve public health, welfare, and safety as well as minimize the adverse impacts of water supply shortage or other water supply emergency conditions. You are asked to conserve water in order to help us achieve our goals.

## Public Participation Opportunities

The City of Friendswood's water system is maintained by the Public Works Department (telephone number 281-996-3382) and is part of the City government. The City Council traditionally meets every first and third Monday of each month at 7:00 p.m. Dates and times are subject to change. The meetings are held at City Hall and are open to public. For more information about the meetings, call 281-996-3200.

## Special Notice

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 or 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline, (800) 426-4791.

## Definitions of Terms Used in the Report

**Maximum Contaminant Level Goal (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 (MCL):** 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 (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 (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the 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 (mg/l) 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.

**NTU** – Nephelometric Turbidity Units

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

**ppq** – parts per quadrillion, or picograms per liter

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

**ppt** – parts per trillion, or nanograms per liter

The following table contains all of the chemical constituents which have been found in your drinking water. The U.S. EPA requires testing of the water system for at least 97 possible constituents. In some cases, the testing frequency for various constituents can range from one to three years:

**2010 REGULATED CONTAMINANTS DETECTED:**

<b>INORGANIC CONTAMINANTS</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Barium	10/17/2006	0.0607	0.067-0.0607	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	10/17/2006	0.79	0.79-0.79	4	4	ppm	N	Erosion of natural deposits; Water additives which promote strong teeth; Discharge from fertilizer and aluminum factories
Nitrate Measured as Nitrogen	2010	0.74	0.03-0.74	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks; Sewage; Erosion of natural deposits

<b>SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES &amp; HERBICIDES</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Altrazine	2010	0.35	0-0.35	3	3	ppb	N	Runoff from herbicide used on row crops
Simazine	2010	0.18	0-0.18	4	4	ppb	N	Herbicide run-off

<b>DISINFECTANTS AND DISINFECTION BY-PRODUCTS</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Haloacetic Acids (HAA5)*	2010	22.2	9.6-22.2	No goal for the total	60	ppb	N	By-product of drinking water chlorination
Total Trihalomethanes (TTHm)*	2010	61.8	10.6-61.8	No goal for the total	80	ppb	N	By-product of drinking water chlorination

**MAXIMUM RESIDUAL DISINFECTANT LEVEL**

<b>DISINFECTANT TYPE</b>	<b>Average Level</b>	<b>Minimum Level</b>	<b>Maximum Level</b>	<b>MRDL</b>	<b>MRDLG</b>	<b>Units</b>	<b>Source</b>
Chloramines Residual	2.85	0.5	3.5	4	4	ppm	Disinfectant used to control microbes

**TOTAL COLIFORM BACTERIA** are used as indicators of microbial contamination of drinking water because testing 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 harder than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Over 400 samples were submitted for testing last year. It is not unusual to have an occasional positive sample simply because of test sensitivity and/or human error in sampling techniques. Once the system is notified of a positive sample, the system operator immediately collects repeat samples from the original sample point and additional locations up and down stream of that location.

<b>MAXIMUM CONTAMINANT LEVEL GOAL</b>	<b>Total Coliform Maximum Contaminant Level</b>	<b>Highest Number of Positive</b>	<b>Free Coliform or E-Coli Maximum Contaminant Level</b>	<b>Total Number of Positive E-Coli or Fecal Coliform</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
0	1 positive monthly sample	1	0	0	N	Naturally present in the environment

**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.

<b>YEAR</b>	<b>Constituent</b>	<b>Highest Average Measurement</b>	<b>Lowest Monthly % of Samples Meeting Limits</b>	<b>Turbidity Limits</b>	<b>Units</b>	<b>Source</b>
2010	Turbidity	0.18	100	0.3	NTU	Soil run-off

**LEAD AND COPPER DEFINITIONS:**

Action Level Goal (ALG): the level of a contaminant in drinking water 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.

<b>LEAD AND COPPER</b>	<b>Date Sampled</b>	<b>MCLG</b>	<b>Action Level (AL)</b>	<b>The 90th Percentile</b>	<b>Number Sites Over AL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Lead	2010	0	15	10.5	3	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposit
Copper	2010	1.3	1.3	0.97	0	ppm	N	Corrosion of household plumbing systems, Erosion of natural deposit, Leaching from wood preservatives

**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 supplier 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 water 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>.

**SECONDARY AND OTHER CONSTITUENTS NOT REGULATED:**

<b>YEAR</b>	<b>Constituent</b>	<b>Average Level</b>	<b>Range of Detects (Low-High)</b>	<b>Secondary Limits</b>	<b>Units</b>	<b>Source</b>
2006	Calcium	48.6	48.6	NA	ppm	Abundant naturally occurring element
2006	Chloride	51	51	250	ppm	Abundant naturally occurring element; Used in water purification; By-product of oil field activity
2006	Magnesium	4.84	4.84	NA	ppm	Abundant naturally occurring element
2006	Manganese	0.0023	0.0023	0.05	ppm	Abundant naturally occurring element
2006	Nickel	0.0029	0.0029	0.1	ppm	Erosion of natural deposits
2006	Sodium	40.8	40.8	NA	ppm	Erosion of natural deposits; By-product of oil field activity
2006	Sulfate	57	57	250	ppm	Naturally occurring; Common industrial by-product; By-product of oil field activity
2006	Total Hardness as CaCO3	141	141	NA	ppm	Naturally occurring calcium
2010	PH	7.6	7.6	>7	units	Measure of corrosivity of water

**The Following Tips are Some Simple Examples of How to Save Water Indoors:**

- Wash only full loads in your washing machine, or adjust the water level to reflect the size of the load.
- Pay attention to your water bill, and become familiar with your water meter—use them to track your water use and detect leaks.
- Purchase appliances that offer water and energy efficient cycle options.
- Fix leaky plumbing fixtures, faucets, and appliances in the house.
- Show children how to turn off the faucets completely after each use.
- Locate your master water shut-off valve so that water can be saved if a pipe bursts.
- Install aerators on every faucet. This could save you as much as one gallon every minute you use them.
- Be aware! Listen for drips and leaks around the house.