

**Recommended 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 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**

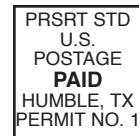
Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.						
Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2009	Turbidity	0.32	99.40	0.3	NTU	Soil runoff

**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.						
Year	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant	
2009	Total Coliform Bacteria	0	*	Presence	Soil runoff	
<b>* Two or more coliform found samples in any single month</b>						

**Fecal Coliform** REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

**City of Humble  
Public Works Department  
102 Granberry  
Humble, Texas 77338**



# 2009 Annual Drinking Water Quality Report

(Consumer Confidence Report)

**CITY OF HUMBLE**

Phone No: (281) 446-2327 or (281) 446-3061

***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:** Monday thru Friday  
**Time:** 8:00 AM. to 5:00 PM.  
**Location:** City of Humble Public Works Dept. 102 Granberry, Humble, TX 77338  
**Phone No:** (281) 446-2327

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

**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.

**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.

***En Español***

Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o' discusiones sobre este reporte en español, favor de llamar al tel. (281) 446-2327 par hablar con una persona bilingue en español.

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

Our drinking water is obtained from GROUND water sources. It comes from the following Lake/River/Reservoir/Aquifer: GULF COAST. A source 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 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 (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.

**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.

**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 (ug/L)
- ppt - parts per trillion, or nanograms per liter
- ppq - parts per quadrillion, or picograms per liter

Year (Range)	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2009 2008	Arsenic	1.1	0	7	10	0	ppb	Erosion of natural deposits; runoff from orchards & runoff from glass and electronics production wastes.
		<i>* These arsenic value are effective January 23, 2006. In the event of a violation, you will be notified.</i>						
2009 2008	Barium	0.286	0.051	0.373	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2009 2008	Fluoride	0.21	0	0.64	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2009	Nitrate	0.09	0	0.32	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2009 2005	Combined Radium 226 & 228	0.81	0	1.37	5	0	pCi/L	Erosion of natural deposits.
2009 2005	Gross beta emitters	2.63	0	3.9	50	0	pCi/L	Decay of natural and man-made deposits.
2009 2005	Gross alpha	3.33	0	5.9	15	0	pCi/L	Erosion of natural deposits

**Required Additional Health Information for Arsenic**

The maximum contaminant level (MCL) for arsenic decreased from 0.05 mg/L (50 ppb) to 0.010 mg/L (10 ppb) effective January 23, 2006. Because the highest reported arsenic level on this report is between 5 ppb and 10 ppb, the following information is required by EPA:

*"While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."*

**Organic Contaminants:**

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2009	Atrazine	0.48	0	0.53	3	3	ppb	Runoff from herbicide used on row crops.
2009	Hexachlorocyclopentadiene	0.16	0.15	0.16	50	50	ppb	Discharge from chemical factories.

**Maximum Residual Disinfectant Level**

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Contaminant
2009	Chlorine Residual, FREE	1.23	0.6	1.9	4	4	ppm	Disinfectant used to control microbes

**Disinfection Byproducts:**

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2009	Total Trihalomethanes	0.9	0	2.7	80	ppb	Byproduct of drinking water disinfection

**Unregulated Initial Distribution System Evaluation for Disinfection Byproducts** WAIVED OR NOT YET SAMPLED

**Unregulated Contaminants:**

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

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2009	Chloroform	12.5	11	14	ppb	Byproduct of drinking water disinfection.
2009	Bromoform	1.3	1.3	1.3	ppb	Byproduct of drinking water disinfection.
2009	Bromodichloromethane	2.3	2.3	2.3	ppb	Byproduct of drinking water disinfection.
2009	Dibromochloromethane	1.35	1.3	1.4	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	3.5	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2007	Copper	0.104	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.