



# **BAYTOWN AREA WATER AUTHORITY**

## **(BAWA) (281) 426-3517**

### **2007 Drinking Water Quality Report**

PWS No. 1011742

#### **En Espanol**

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel. (281) 426-3517 – para hablar con una persona bilingue en espanol.

#### **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 immune systems 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. 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 at (800-426-4791).

#### **WHERE DO WE GET OUR DRINKING WATER?**

Our drinking water is obtained from SURFACE water sources. It comes from the Trinity River by way of the Coastal Industrial Authority Canal. TCEQ completed an assessment of our source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this report. For more information on source water assessments and protection efforts at our system, please contact us.

#### **PUBLIC PARTICIPATION OPPORTUNITIES**

July 12, 2007, 6 p.m. at the City of Baytown City Hall Council Chambers, (281) 422-8281. To learn about future public meeting (concerning your drinking water), or to request to schedule one, please call BAWA at (281) 426-3517

#### **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.

#### **OUR DRINKING WATER MEETS OR EXCEEDS ALL FEDERAL (EPA) DRINKING 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 following pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

#### **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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

**About the following Tables:**

The following tables contain 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 up to 97 constituents.

**INORGANIC:**

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2003	Barium	.039	.039	0.039	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2007	Fluoride	0.57	0.57	0.57	4	4	ppm	Erosion of natural deposits; Water additives, which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2006	Nitrite	0.01	0.01	0.01	1	1	ppm	Run-off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2006	Gross beta emitters	4.4	4.4	4.4	50	0	pCi/l	Decay of natural and man-made deposits.
2007	Nitrate	0.58	0.58	0.58	10	10	ppm	Run-off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

**ORGANIC CONTAMINANTS**

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2007	Atrazine	0.12	0.12	0.12	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 Reports (SWMOR). On the CCR report, the system must provide disinfection type, minimum, maximum and average level.

Year	Disinfectant	Average Level	Minimum Level	Maximum Levels	MRDL	MRDLG	Unit of Measure	Source of Contaminant
2007	Monochloramine	2.99	1.48	3.8	4	<4.0	ppm	Disinfectant to control microbes.

**DISINFECTION BYPRODUCTS:**

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2007	Total Haloacetic Acids	6.3	6.3	6.3	60	ppb	Byproduct of drinking water disinfection.
2007	Total Trihalomethanes	47.6	47.6	47.6	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 dibromochloromethanes are distribution by products. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Reason for Monitoring
2007	Chloroform	25	25	25	ppb	Byproduct of drinking water disinfection.
2007	Bromodichloromethane	10	10	10	ppb	Byproduct of drinking water disinfection.
2007	Dibromodichloromethane	2.2	2.2	2.2	ppb	Byproduct of drinking water disinfection.

**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	Limits	Unit of Measure	Source of Contaminant
2007	Turbidity	0.20	100%	0.30	NTU	Soil run-off

**TOTAL ORGANIC CARBON (TOC)**

Total organic carbon (TOC) no health effects. The disinfectant 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	Average Level	Minimum Level	Maximum Level	Unit of Measure	Reason for Monitoring
2007	Source Water	7.65	6.045	11.735	ppm	Naturally present in the environment

**CRYPTOSPORIDIUM INFORMATION**

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing method determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

**Total Coliform** – Reported monthly tests found no Coliform Bacteria.

**Fecal Coliform** – Reported monthly tests found no Fecal Coliform Bacteria

**SECONDARY AND OTHER NOT REGULATED CONSTITUENTS**

(No associated adverse health effects)

Year	Constituent	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Constituent
2007	Bicarbonate	100	100	100	NA	ppm	Corrosion of carbonate rocks such as limestone.
2003	Calcium	31.1	31.1	31.1	NA	ppm	Abundant naturally occurring element.
2007	Chloride	45	45	45	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2003	Copper	0.003	0.003	0.003	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2003	Magnesium	3.5	3.5	3.5	NA	ppm	Abundant naturally occurring element.
2003	Manganese	0.0061	0.0061	0.0061	.05	ppm	Abundant naturally occurring element.
2006	Nickel	0.003	0.003	0.003	NA	ppm	Erosion of natural deposits
2007	pH	7.4	7.4	7.4	>7.0	units	Measure of corrosivity of water.
2003	Sodium	31	31	31	NA	ppm	Erosion of natural depository; byproducts of oil field activity.
2007	Sulfate	29	29	29	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2007	Total Alkalinity as CaCO3	82	82	82	NA	ppm	Naturally occurring soluble mineral salts.
2007	Total Dissolved Solids	223	223	223	1000	ppm	Total dissolved mineral constituents in water
2003	Total Hardness as CaCO3	92	92	92	NA	ppm	Naturally occurring calcium.
2003	Zinc	0.062	0.062	0.062	5	ppm	Moderately abundant naturally occurring element; used in the metal industry.

**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, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

**LEAD AND COPPER:** Testing waived, not reported, or none detected.

**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 our 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/savedwater/lead>.

**VIOLATIONS:** NO VIOLATIONS

**DEFINITIONS:**

**Maximum Contaminant Level (MCL)** - The highest 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 not known or expected health risk. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** – The highest chloramines level.

**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** - A required process intended to reduce the level of a contaminant in drinking water.

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

**Nephelometric Turbidity Units (NTU)** - Unit of measurement for water cloudiness (turbidity).

**MFL** – million fibers per liter

**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.

The **Baytown Area Water Authority** operates the Fritz Lanham Water Treatment Facility, which was completed in 1980. The facility is located on a 68-acre tract of land located at 7425 Thompson Road. This facility is operated on a 24-hour basis. The 14 member staff has striven to produce the highest quality water ensuring that the safest and most reliable water is delivered to you. These efforts have been rewarded with the State of Texas awarding the plant and staff with “**Superior Water**” status. The staff takes great pride in providing safe drinking water and is looking to the future for new technology to ensure that safe and reliable drinking water will always be provided at your tap.