

OUR DRINKING WATER IS REGULATED

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.

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 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.

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 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.

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2013, our system lost an estimated 41,504,057 gallons of water. If you have any questions about the water loss audit please call 713-662-8170.

DROUGHT CONTINGENCY AND WATER CONSERVATION PLAN

The City of Bellaire has a Drought Contingency Plan should a drought or other event occur. Here are the stages:

Stage 1—Annual Drought and Conservation Awareness Campaign

From May 1 through October 31 of each year, the City of Bellaire seeks to increase customer awareness of water conservation and encourage the most efficient use of water.

Stage 2—MILD Water Shortage Conditions

When Average Daily Water Usage reaches 65% of safe distribution capacity for three (3) consecutive days, water customers are requested to **voluntarily** limit the irrigation of landscaped areas to even-numbered days for customers with a street address ending in an even number, and odd-numbered days for water customers with a street address ending in an odd number, and to irrigate landscapes only between the hours of 12:00 a.m. to 3:00 a.m. and 9:00 p.m. to 12:00 a.m. on designated watering days.

Stage 3—MODERATE Water Shortage Conditions

When Average Daily Water Usage reaches 70% of safe distribution capacity for three (3) consecutive days, the following **mandatory** lawn-watering schedule shall be implemented. Customers with even numbered addresses may water on Sundays and Thursdays. Customers with odd numbered addresses may water on Saturdays and Wednesdays. Watering shall occur only between the hours of 12:00 a.m. to 3:00 a.m. and 9:00 p.m. to 12:00 a.m. on designated watering days.

Stage 4—SEVERE Water Shortage Conditions

When Average Daily Water Usage reaches 80% of safe distribution capacity for two (2) consecutive days, the City will **ban** the use of water not essential for public health or safety including: Watering lawns and shrubs, street washing, washing driveways and automobiles, water hydrant flushing, filling swimming pools, athletic field watering.

After five (5) consecutive days of water usage below the triggering factors of the Stage, the Drought Contingency Plan reverts to the previous Stage.

Some helpful tips to conserve water:

- Do not water lawns daily. *(Do not overwater or allow water to run off to street; change timers on sprinklers to water after midnight.)*
- Check your swimming pool to make sure it is not overflowing.
- Check for and repair detectible water leaks as soon as possible.
- Keep showers under five minutes.
- Turn water off while brushing teeth.
- Replace older-model showerheads and faucets.
- Limit washing vehicles.

Your cooperation will help ensure that water supplies are maintained at maximum levels and prevent the need to impose more restrictive measures to conserve water.

For more information, go to <http://ci.bellaire.tx.us/index.aspx?NID=1009>



Public Participation Opportunities:

Public input concerning the City of Bellaire water system may be made at:

4337 Edith
Bellaire, TX
Monday - Friday
9:00 am - 3:00 pm
Contact: Mr. Charles Hawkins
713-662-8170
<http://ci.bellaire.tx.us>

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. 713-662-8170 para hablar con una persona bilingue en espanol.

City of Bellaire

Annual Drinking Water Quality Report

2013



OUR DRINKING WATER IS RATED SUPERIOR

CITY OF HOUSTON WATER IS RATED SUPERIOR

MEETS OR EXCEEDS ALL FEDERAL (EPA) DRINKING WATER REQUIREMENTS



PWS ID # TX1010004

Source of Drinking Water

The sources of drinking water (both tap 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 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 salt 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.
- **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.

Where Do We Get Our Drinking Water?

The source of drinking water used by the City of Bellaire is 53% Surface Water supplied by the City of Houston's East Water Purification Plant, and 47% Ground Water from the Evangeline Aquifer. 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 source water protection strategies. Some of this source water assessment 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.



Definitions and Abbreviations:

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 Contaminant Level (MCL): The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in 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.

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

Picocuries per liter (pCi/L): A measure of radioactivity.

Parts per million (ppm): The equivalent of milligrams per liter (mg/L) is analogous to 1 minute in 2 years.

Parts per billion (ppb): The equivalent of micrograms per liter (ug/L) is analogous to 1 minute in 32 years.

NA: Not applicable.

Regulated Contaminants:

About This Report: The following 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.

City of Bellaire

	YEAR	MCL	MCLG	RANGE Minimum-Maximum Level	Violation	Likely Source of Contamination
Inorganic Contaminants						
Arsenic (ppb)	2008	10	0	0—3.5	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium (ppm)	2008	2	2	0.0787—0.14	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride (ppm)	2011	4	4	0.61—0.72	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	2013	10	10	0.01-0.36	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits.
Nitrite (ppm)	2012	1	1	0—0.02	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits.
Beta/photon emitters (mrem/yr)	2011	4	0	0—4.3	No	Decay of natural and man-made deposits. <i>The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for beta particles.</i>
Combined Radium 226/228 (pCi/L)	2011	5	0	1—1.1	No	Erosion of natural deposits.
Gross alpha (pCi/L)	2011	15	0	0—4.9	No	Erosion of natural deposits.
Synthetic Organic Contaminants						
Atrazine (ppb)	2012	3	3	0.19-0.24	No	Runoff from herbicide used on row crops.
Simazine (ppb)	2013	4	4	0-0.15	No	Herbicide runoff.

	YEAR	90 th PERCENTILE	ACTION LEVEL	NUMBER OF SITES EXCEEDING ACTION LEVEL	Violation	Likely Source of Contamination
Lead and Copper						
Lead ¹ (ppb)	2013	8.48	15	3	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Copper (ppm)	2013	0.214	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.

¹ 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. 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>.

	YEAR	MCL	MCLG	RANGE Minimum- Maximum Level	Violation	Likely Source of Contamination
Disinfection Byproducts						
Total Haloacetic Acids (ppb)	2013	60	None	0—26.6	No	By-product of drinking water chlorination.
Total Trihalomethanes (ppb)	2013	80	None	0—34.7	No	By-product of drinking water chlorination.

Total Coliform: Reported monthly tests found no Coliform bacteria.

Fecal Coliform: Reported monthly tests found no Fecal Coliform bacteria.

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, the absence from water is a good indication that the water is microbially safe for human consumption.

	AVG	MAX
Unregulated Contaminant Monitoring Rule²		
Chloroform (ppb)	11.5	13
Bromodichloromethane (ppb)	7.7	7.7
Dibromochloromethane (ppb)	3.25	3.3
Bromoform (ppb)	0.3	0.50

²Unregulated contaminants are those which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected are reported in the following table. For additional information and data visit <http://www.epa.gov/safewater/ucmr/ucmr2/index.html> or call the Safe Drinking Water Hotline at 800-426-4791.

	YEAR	MRDL	MRDLG	RANGE Minimum-Maximum Level	AVG
Maximum Residual Disinfectant Level					
Chloramine Residual	2013	4	4	1.20—1.73	1.49
Likely Source of Contamination: Disinfectant used to control microbes.					

City of Houston

	MCL	MCLG	AVG	MAX
Inorganic Contaminants				
Barium (ppm)	2	2	0.070	0.047
Fluoride (ppm)	4	4	0.38	0.40
Nitrate (ppb)	10	10	0.44	0.64
Nitrite (ppm)	1	1	0.01	0.02
Synthetic Organic Contaminants				
Simazine (ppb)	4	4	0.09	0.16
Atrazine (ppb)	3	3	0.27	0.34