2015 Annual Drinking Water Quality Report

(Consumer Confidence Report)

City of Texas City Utilities Department Customer Service (409) 359-3505 EPA'S Safe Drinking Water Hotline 1-800-426-4791

Special Notice

Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system 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/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 (800-426-4791).

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. We 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 Drinkin10 http://www.epa.gov/safewater/lead.

Public Participation Opportunities

Date: 1st and 3rd Wednesday of every month
Time: 5:00 pm
Location: City Hall
Phone: (409) 948-3111

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

En español. Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (409) 643-5860 - para hablar con una persona bilingüe en español.

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.

Source 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 pickup substances resulting from the presence of Contaminants that may be present in source: Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and; 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; 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.

Information About Our Sources of Water. A Source Water Susceptibility Assessment for your drinking water sources(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. For more information about your sources of water, please refer to the Source Water Assessment Viewer available at http://www.tceq.texas.gov/gis/swaview
Furthder details about sources and sourcewater assessments are available in Drinking Water Watch at http://dww2.tceq.texas.gov/DWW/

Emergency Water Source. The City of Texas City owns and operates eleven groundwater wells to supplement drinking water recieved from our primary source, Gulf Coast Water Authority (GCWA). Texas City will operate these wells as needed to maintain capacity that insures safe drinking water and fire protection. Water from groundwater wells are treated with the same disinfection standards as drinking water from GCWA.

2015 Emergency Water Use. Duration: Approximately 60 combined hours. Amount used: 4,286,00 <1% of Texas City's annual consumption.

Explanation of use. During 2015, GCWA conducted maintanence that required Texas City to supplement with wells to maintain adequete storage capacity.

Water Quality. For more information on groundwater wells operated by Texas City please contact Texas City Utilities Office (409) 359-5505.

Water Loss Report. Texas City determines the percentage of water loss annually. Water loss comes from several factors such as meter innaccuracy, service line leaks, water main leaks and unauthorized water use. Listed below is the most current water loss. If you have questions in regards to this, contact Texas Cities Utilities Office (409) 359-5505. **2015 Water Loss 21.9%**

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. U.S. EPA requires water systems to test up to 97 contaminants.

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.

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.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.

ABBREVIATIONS

NTU- Nephelometric Turbidity Units
MFL- million fibers per liter (a measure of asbestos)
pCi/L- picocuries per liter (a measure of radio activity)
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

DEFINITIONS

Maximum Contaminant Level Goal or 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 or 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 or 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 or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

na: not applicable.

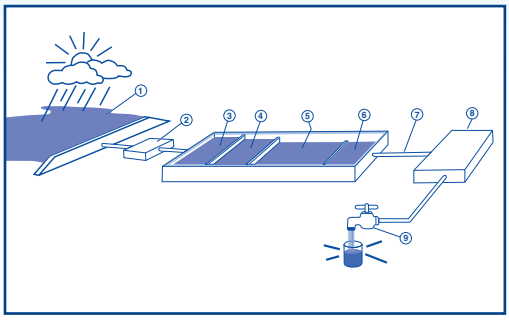
Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

TURNING RIVER WATER INTO DRINKING WATER

We get our Drinking Water from the Brazos river and it must be treated to a higher level to improve the quality before it flows through your tap. Once the Brazos River water reaches the Gulf Coast Water Authority (GCWA) treatment plant, it undergoes five (5) steps of treatment:

- Chemicals are added which encourage suspended particles in the water to clump together, so they become heavy enough to settle to the bottom of the treatment basin.
- These particles are allowed to settle for about 2-6 hours.
- The water is filtered through more than four feet of sand, gravel and granular activated carbon.
- The alkalinity of the water is stabilized to ensure that metals are not dissolved from plumbing as it passes through.
- Strong disinfectants, chlorine dioxide and chloramines (a combination of chlorine and ammonia), are added to kill harmful microorganisms, such as typhoid and polio. Combining chlorine dioxide and chloramines, is more beneficial than adding chlorine alone.
  Small amounts of fluoride are added to help prevent tooth decay.



1. **Source river:** Brazos River.
2. **Raw water pump station:** Here water is pumped from the Brazos River to GCWA's Thomas S. Mackey Water Treatment Plant.
3. **Flash mix:** Chemicals are added, so particles in the water will clump together and settle out.
4. **Coagulation basin:** The particulate matter begins to clump together.
5. **Sedimentation basin:** Particles settle to the bottom of the basin and are removed.
6. **Filters:** Water is filtered through 4 feet of sand, gravel and granular activated carbon.
7. **Disinfection:** Chlorine dioxide is added to kill bacteria and viruses.
8. **Clearwell storage:** Water is temporarily stored in tanks before it is pumped to the public.
9. **Distribution:** Drinking water reaches the public through more than 100 miles of pipeline.

INORGANIC CONTAMINANTS

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	UNITS	VIOLATION	Likely Source of Contamination
2015	Antimony	1.0	1.0-1.0	6	6	ppb	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
2015	Arsenic	2.0	2.0-2.0	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2015	Barium	0.0763	0.0763-0.0763	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2015	Beryllium	0.80	0.80-0.80	4	4	ppb	N	Discharge from metal refineries and coalburning factories; Discharge from electrical, aerospace, and defense.
2015	Cadmium	1.0	1.0-1.0	5	5	ppb	N	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries.
2015	Chromium	10.0	10.0-10.0	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
2015	Fluoride	0.20	0.20-0.20	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum.
2015	Mercury	0.40	0.40-0.40	2	2	ppb	N	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.
2015	Nitrate [measured as Nitrogen]	1.25	1.21-1.25	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
2015	Nitrite [measured as Nitrogen]	Levels lower tthan detect level	0-0	1	1	ppm	N	Runoff from fertilizer; Leaching from septic tanks, sewage; Erosion of natural deposits.
2015	Selenium	3.0	3.0-3.0	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
2015	Thallium	0.4	0.4-0.4	0.5	2	ppb	N	Discharge from electronics, glass, and Leaching from ore-processing site; drug factories.

RADIOACTIVE CONTAMINANTS

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	UNITS	VIOLATION	Likely Source of Contamination
2012	Beta/photon emitters	4.0	4.0-4.0	0	50	pCi/L	N	Decay of natural and man-made deposits. EPA considers 50 pCi/L to be the level of concern for beta particles
2012	Combined Radium 226/228	1	1-1	0	5	pCi/L	N	Erosion of natural deposits.
2012	Gross alpha excluding radon and uranium	2.0	2.0-2.0	0	15	pCi/L	N	Erosion of natural 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.

Year (Range)	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2015	Turbidity	0.90	98.9	1.0	NTU	Soil runoff.

SYNTHETIC ORGANIC CONTAMINANTS Including pesticides and herbicides

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	UNITS	VIOLATION	Likely Source of Contamination
2011	2,4,5-TP (Silvex)	levels lower than detect level	0-0	50	50	ppb	N	Residue of banned herbicide.
2011	2,4-D	level lower than detect level	0-0	70	70	ppb	N	Runoff from herbicide used on row crops.
2015	Alachlor	0.20	0.20-0.20	0	2	ppb	N	Runoff from herbicide used on row crops.
2015	Atrazine	0.24	0.14-0.24	3	3	ppb	N	Runoff from herbicide used on row crops.
2015	Benzo(a) pyrene	0.02	0.02-0.02	0	.2	ppb	N	Leaching from linings of water storage tanks and distribution lines.
2011	Carbofuran	levels lower than detect level	0-0	40	40	ppb	N	Leaching of soil fumigant used on rice and alfalfa.
2015	Chlordane	0.2	0.2-0.2	0	2	ppb	N	Residue of banned termiticide.
2011	Dalapon	levels lower than detect level	0-0	200	200	ppb	N	Runoff from herbicide used on rights of way.
2015	Di (2-ethylhexyl) adipate	0.6	0.6-0.6	400	400	ppb	N	Discharge from chemical factories.
2015	Di (2-ethylhexyl) phthalate	0.6	0.6-0.6	0	6	ppb	N	Discharge from rubber and chemical factories.
2011	Dibromoch-loropropane (DBCP)	levels lower than detect level	0-0	0	0.2	ppb	N	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
2011	Dinoseb	levels lower than detect level	0-0	7	7	ppb	N	Runoff from herbicide used on soybeans and vegetables.
2015	Endrin	0.01	0.01-0.01	2	2	ppb	N	Residue of banned insecticide.
2011	Ethylene dibromide	levels lower than detect level	0-0	0	0.05	ppb	N	Discharge from petroleum refineries.
2015	Heptachlor	0.04	0.04-0.04	0	0.4	ppb	N	Residue of banned termiticide.
2015	Heptachlor epoxide	0.02	0.02-0.02	0	0.2	ppb	N	Breakdown of heptachlor.
2015	Hexach-lorobenzene	0.1	0.1-0.1	0	1	ppb	N	Discharge from metal refineries and agricultural chemical factories.
2015	Hexachlorocy clopentadiene	0.1	0.1-0.1	50	50	ppb	N	Discharge from chemical factories.
2015	Lindane	0.02	0.02-0.02	0	0.2	ppb	N	Runoff/leaching from insecticide used on cattle, lumber, gardens.
2015	Methoxychlor	0.1	0.1-0.1	40	40	ppb	N	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock.
2011	Oxamyl [Vydate]	Levels lower than detect level	0-0	200	200	ppb	N	Runoff/leaching from insecticide used on apples, potatoes tomatoes.
2015	Pentachlo-rophenol	0.04	0.04-0.04	0	1	ppb	N	Discharge from wood preserving factories.
2011	Picloram	Levels lower than detect level	0-0	500	500	ppb	N	Herbicide runoff.
2015	Simazine	0.25	0.07-0.25	4	4	ppb	N	Herbicide runoff.
2015	Toxaphene	1.0	1.0-1.0	0	3	ppb	N	Runoff/leaching from insecticide used on cotton and cattle.

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Year (Range)	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Disinfectant
2015	Chloramine	2.3	1.3	3.4	4	4	ppm	Disinfectant used to control microbes.
2015	Chlorine Dioxide	79.5	0.0	480	800	800	ppb	Disinfectant used to control microbes.

REGULATED CONTAMINANTS

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	UNITS	VIOLATION	Likely Source of Contamination
2015	Haloacetic Acids (HAA5)*	34.3	13.5-34.3	No goal for total	60	ppb	N	By-product of drinking water chlorination.
2015	Trihalomethanes (TThm)*	62.8	31.2-62.8	No goal for total	80	ppb	N	By-product of drinking water chlorination.
2015	Chlorite	0.6	0.02-0.6	0.80	1.0	mg/L	N	Chlorite occurs when chlorine dioxide breaks down.

UNREGULATED CONTAMINANTS

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

Year (Range)	Contaminant	Avereage Result	Unit of Measure	Source of Contaminant
2015	Chloroform	15.5	ppb	By-product of drinking water disinfection.
2015	Bromoform	4.4	ppb	By-product of drinking water disinfection.
2015	Bromodichloromethane	18.7	ppb	By-product of drinking water disinfection.
2015	Dibromochloromethane	14.7	ppb	By-product of drinking water disinfection.

LEAD AND COPPER

Date Sampled	Contaminant	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	UNITS	VIOLATION	Likely Source of Contamination
2013	Copper	1.3	1.3	0.348	0	ppm	N	Erosion of natural deposits. Leaching from wood preservatives; Corrosion of household plumbing systems.
2013	Lead	0	15	1.29	0	ppb	N	

Definitions:

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

pH

pH a figure expressing the acidity or alkalinity of a solution on a logarithimic scale on which 7 is neutral, lower values are more acid, and high values are more alkaline.

Year	Highest Reading	Lowest Reading	Average Reading
2015	8.19	7.03	7.57

ALKALINITY

The alkalinity of water may be defined as its capacity to neutralize acid.

Year	Highest Reading	Lowest Reading	Average Reading	Units
2015	268	90	127	Mg/L

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2015 Consumer Confidence Report

THIS IS YOUR ANNUAL REPORT ON DRINKING WATER QUALITY.