



## 2010 DRINKING WATER QUALITY REPORT

City of Heath, Texas

Consumer Confidence Report

972-771-6228

### Heath Drinking Water is Regulated by Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of water we provide to you, our customers. The analysis was made using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented herein. We hope this information helps you become more knowledgeable about what is in your 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 activity. Contaminants that may be present in source water before treatment 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 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.

The source of drinking water used by the City of Heath is Purchased Surface Water. 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 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.

#### *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 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.

#### *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 EPS's Safe Drinking Water Hotline at (800) 426-4791.

#### *Secondary Constituents*

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can affect 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.

**En Español** Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llama al tel. 972-771-6228 - para hablar con una persona bilingüe en español.

**This Chart lists the contaminants detected in North Texas Municipal Water District drinking water supplied to Member Cities and Customers.**

INORGANIC CONTAMINANTS								
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Barium	0.04	0.03	0.08	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2010	Fluoride	0.58	0.51	0.64	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2010	Nitrate	0.26	< 0.07	0.51	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2010	Gross beta emitters	N/A	N/A	4.4	50	0	pCi/L	Decay of natural and man-made deposits.

ORGANIC CONTAMINANTS								
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Atrazine	< 0.1	< 0.1	0.24	3	3	ppb	Runoff from herbicide used on row crops.
2010	Simazine	< 0.07	< 0.07	0.08	4	4	ppb	Runoff from herbicide used on row crops.

MAXIMUM RESIDUAL DISINFECTANT LEVEL								
Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2010	Chlorine Residual (Chloramines)	1.73	0.52	2.2	4.0	<4.0	ppm	Disinfectant used to control microbes.
2010	Chlorine Dioxide	0	0	0	0.8	0.8	ppm	Disinfectant.
2010	Chlorite	0.33	0.01	0.75	1.0	N/A	ppm	Disinfectant.

DISINFECTION BYPRODUCTS								
Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Total Haloacetic Acids	28.3	28.3	28.3	60		ppb	Byproduct of drinking water chlorination.
2010	Total Trihalomethanes	47.4	47.4	47.4	80		ppb	Byproduct of drinking water chlorination.

UNREGULATED CONTAMINANTS								
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Chloroform	19.1	19.1	19.1			ppb	Byproduct of drinking water disinfection.
2010	Bromoform	1	1	1			ppb	Byproduct of drinking water disinfection.
2010	Bromodichloromethane	17.8	17.8	17.8			ppb	Byproduct of drinking water disinfection.
2010	Dibromochloromethane	9.5	9.5	9.5			ppb	Byproduct of drinking water disinfection.

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

UNREGULATED CONTAMINANT MONITORING RULE 2 (UCMR2)								
Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2009	N-nitrosodimethylamine (NDMA)	0.0023	0	0.0023			ppb	Byproduct of manufacturing process.

**NOTE:** Unregulated contaminants are those for 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 this report. 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.

LEAD AND COPPER								
Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Lead	0.0019	0.0002	0.02		0.015	ppm	Corrosion of customer plumbing. Action Level = .015
2010	Copper	1.2	0.21	1.4		1.3	ppm	Byproduct of drinking water disinfection. Action Level = 1.3

**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						
Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2010	Turbidity	1.14	99.86	0.3	NTU	Soil runoff.

**NOTE:** 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.

TOTAL ORGANIC CARBON						
Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2010	Source Water	4.34	3.06	9.32	ppm	Naturally present in the environment.
2010	Drinking Water	3.17	2.22	5.74	ppm	Naturally present in the environment.
2010	Removal Ratio	30%	15%	45%	% removal *	N/A

\* Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

**NOTE:** Total organic carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

TOTAL COLIFORM						
Year	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant	
2010	Total Coliform Bacteria	2	*	Presence	Naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.	

\* Two or more coliform found samples in any single month.

**VIOLATION:** During the month of December 2010, the City of Heath was notified by our testing laboratory that one water sample had the presence of coliform bacteria which caused the sample to fail water quality parameters. Because of the failure of the sample, additional sampling was required. Upon re-sampling of the area in question, one of the additional samples also failed because of the presence of coliform bacteria. When the second sample failed, the City of Heath was notified by the TCEQ of a violation of the Total Coliform Rule, and the City was required to notify our water customers of the violation. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. The City of Heath immediately investigated the failure of samples. The City made changes in how the samples are taken, stored, and transported to the laboratory. It is the City of Heath's belief that the sample failures were caused by how the samples were handled after the samples were taken and not with the water or the water system. After the sampling procedures were changed all samples passed by December 31, 2010.

SECONDARY AND OTHER CONSTITUENTS NOT REGULATED (No associated adverse health effects)							
Year or Range	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2010	Bicarbonate	100	73	120	N/A	ppm	Corrosion of carbonate rocks such as limestone.
2010	Calcium	56	34	87	N/A	ppm	Abundant naturally occurring element.
2010	Chloride	28	24	34	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2010	Copper	0.09	0.04	0.13	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2010	Hardness as Ca/Mg	174	162	185	N/A	ppm	Naturally occurring calcium and magnesium.
2010	Iron	<0.2	<0.2	<0.2	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2010	Magnesium	4	3.6	4.7	N/A	ppm	Abundant naturally occurring element.
2010	Manganese	< 0.001	< 0.001	0.002	0.05	ppm	Abundant naturally occurring element.
2010	Nickel	0.04	0.03	0.05	N/A	ppm	Erosion of natural deposits.
2010	pH	7.8	7.4	8.6	>7.0	units	Measure of corrosivity of water.
2010	Sodium	32	25	36	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity.
2010	Sulfate	79	56	96	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2010	Total Alkalinity as CaCO3	100	73	120	N/A	ppm	Naturally occurring soluble mineral salts.
2010	Total Dissolved Solids	346	336	355	1000	ppm	Total dissolved mineral constituents in water.
2010	Total Hardness as CaCO3	149	107	186	N/A	ppm	Naturally occurring calcium.
2010	Zinc	<0.01	<0.01	0.17	5	ppm	Moderately abundant naturally occurring element used in the metal industry.

# Heath Drinking Water is Regulated by Federal (EPA) Drinking Water Requirements

*This report was prepared by the City of Heath and mailed to all Heath water customers.*

*Copies of this report are available in the Public Works Department and on the City of Heath website - [www.heathtx.com](http://www.heathtx.com). If you know someone who did not receive a copy of this report or you would like additional copies, please contact us at*

*972-771-6228 or at  
City of Heath  
200 Laurence Drive  
Heath, Texas 75032*



## ABBREVIATIONS / DEFINITIONS

### DEFINITIONS

(The following tables contain scientific terms and measures, some of which may require explanation )

**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 MCLGs as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of 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.

**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.

**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 on 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 water.

### ABBREVIATIONS

**NTU** - Nephelometric Turbidity Units (this is the unit used to measure water turbidity)

**MFL** - Million fibers per liter (a measure of asbestos)

**pCi/L** - picocuries per liter (a measure 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

### PUBLIC PARTICIPATION OPPORTUNITIES

*To request that an item concerning drinking water be placed on a future City Council agenda for public input, please email [cityhall@heathtx.com](mailto:cityhall@heathtx.com) or call the City Secretary at 972-961-4876. Currently, there are no public meetings concerning our drinking water scheduled. The City Council meets the first and third Tuesdays of the month*