



2011 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 annual Water Quality Report covers the period of January 1 to December 31, 2011. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. 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. For more information about your sources of water, please refer to the Source Water Assessment View available at the following URL: <http://gis3.tceq.state.tx.us/sway/Controller/index.jsp?wtrsrc=> Some of this source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.texas.gov/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

Special Notice

Required Language for ALL Community Public Water Systems

Some people 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. These people should seek advice about drinking water from their physician or health care provider. EPA / CDC 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

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 contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien. Si tiene preguntas o comentarios sobre éste informe en español, favor de llama al tel. 972-771-6228

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
2011	Arsenic	<0.001	<0.001	0.001	0.01	0.01	ppm	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2011	Barium	0.04	0.04	0.04	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2011	Fluoride	0.66	0.46	0.66	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2011	Nitrate	0.55	< 0.05	0.55	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
2011	Atrazine	0.19	0.18	0.2	3	3	ppb	Runoff from herbicide used on row crops.
2011	Simazine	0.08	< 0.07	0.16	4	4	ppb	Runoff from herbicide used on row crops.
2011	Di(2-ethylhexyl)adipate	0.37	< 0.62	0.74	400	400	ppb	Discharge from chemical factories.

MAXIMUM RESIDUAL DISINFECTANT LEVEL								
Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2011	Chlorine Residual (Chloramines)	1.84	0.31	2.2	4.0	<4.0	ppm	Disinfectant used to control microbes.
2011	Chlorine Dioxide	0	0	0.15	0.8	0.8	ppm	Disinfectant.
2011	Chlorite	0.48	0	0.80	1.0	N/A	ppm	Disinfectant.

DISINFECTION BYPRODUCTS								
Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2011	Total Haloacetic Acids	15.17	15.17	15.17	60	N/A	ppb	Byproduct of drinking water disinfection.
2011	Total Trihalomethanes	33.2	33.2	33.2	80	N/A	ppb	Byproduct of drinking water disinfection.

UNREGULATED CONTAMINANTS								
Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2011	Chloroform	10.6	10.6	10.6	N/A	N/A	ppb	Byproduct of drinking water disinfection.
2011	Bromoform	1.5	1.5	1.5	N/A	N/A	ppb	Byproduct of drinking water disinfection.
2011	Bromodichloromethane	12.9	12.9	12.9	N/A	N/A	ppb	Byproduct of drinking water disinfection.
2011	Dibromochloromethane	8.2	8.2	8.2	N/A	N/A	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.

LEAD AND COPPER								
Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2010	Lead	1.9	0.2	20	AL=15	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits. Action Level = 15
2010	Copper	1.2	0.21	1.4	AL=1.3	1.3	ppm	Erosion of natural deposits. Leaching from wood preservatives; Corrosion of household plumbing systems. 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. 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 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
2011	Turbidity	0.96	99.15	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
2011	Source Water	4.92	4.32	6.34	ppm	Naturally present in the environment.
2011	Drinking Water	3.93	3.52	4.66	ppm	Naturally present in the environment.
2011	Removal Ratio	20%	11%	35%	% 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
2011	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment.

* One or more coliform found sample in any single month.

NOTE: No more than 5% positive. Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing 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.

**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
2011	Bicarbonate	100	73	120	N/A	ppm	Corrosion of carbonate rocks such as limestone.
2011	Calcium	43	32	54	N/A	ppm	Abundant naturally occurring element.
2011	Chloride	28	25	33	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2011	Iron	<0.06	<0.05	0.07	0.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2011	Magnesium	4.1	3.9	4.3	N/A	ppm	Abundant naturally occurring element.
2011	Manganese	0.001	< 0.001	0.002	0.05	ppm	Abundant naturally occurring element.
2011	Nickel	0.004	0.004	0.005	N/A	ppm	Erosion of natural deposits.
2011	pH	7.7	7.6	7.9	>7.0	units	Measure of corrosivity of water.
2011	Sodium	32	29	39	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity.
2011	Sulfate	67	65	68	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2011	Total Alkalinity as CaCO3	88	63	104	N/A	ppm	Naturally occurring soluble mineral salts.
2011	Total Dissolved Solids	259	249	263	1000	ppm	Total dissolved mineral constituents in water.
2011	Total Hardness as CaCO3	124	95	153	N/A	ppm	Naturally occurring calcium.
2011	Zinc	<0.01	<0.01	0.01	5	ppm	Moderately abundant naturally occurring element used in the metal industry.

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This report was prepared by the City of Heath and mailed to all Heath water customers. Copies of this report are available at the Public Works Department and on the City of Heath website - www.heathtx.com. For more information regarding this report or to receive additional copies, please contact us at 972-771-6228 or at City of Heath 200 Laurence Drive Heath, Texas 75032



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 level of a contaminant 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 (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 in 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 or call the City Secretary at 972-771-6228. Currently, there are no public meetings concerning our drinking water scheduled. The City Council meets the first and third Tuesdays of the month