

2008 Annual Drinking Water Quality Report



(512) 312-0084

The Texas Commission on Environmental Quality (TCEQ) requires that all drinking water suppliers provide a water quality report to their customers on an annual basis. This Drinking Water Quality Report provides information on the City of Buda drinking water. We are dedicated to providing high quality drinking water to our citizens.

Public Participation Opportunities

The public is welcome to attend the Buda city council meetings held each 1st and 3rd Tuesday of the month. The meetings are located in the council chambers at City Hall at 121 Main Street in Buda. For specific questions related to this report, please call (512) 312-2876.

En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (512) 312-0084 – para hablar con una persona bilingüe en español.

Water Sources

The sources of drinking 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, and organic chemical contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

Our Drinking Water Is Regulated

Our drinking water is regulated by the Texas Commission on Environmental Quality and they have determined that certain water quality issues exist which prevent our water from meeting all of the requirements as stated in the Federal Drinking Water Standards. Each issue is listed in this report as a violation and we are working closely with the TCEQ to achieve solutions.

Where do we get our drinking water?

Our drinking water is obtained from ground water and surface water sources. Our ground water comes from the Edwards Aquifer which currently supplies 75% of our water. This water is treated at each individual well site in the City of Buda. The remaining 25% comes from Canyon Lake via the Guadalupe River. This water is treated at the San Marcos Texas Surface Water Treatment Plant. Please see the third page of this report for test results from their facility. For more information on source water assessments and protection efforts at our system, please contact us.

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).

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 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. The 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 (1-800-426-4791).

About The Following Pages

The pages that follow list all of the federally regulated or monitored contaminants in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

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 cause 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.

ABBREVIATIONS

- NTU** – Nephelometric Turbidity Units
- MFL** – million fibers per liter (a measure of asbestos)
- 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 (µg/L)
- ppt** – parts per trillion, or nanograms per liter
- ppq** – parts per quadrillion, or picograms per liter

DEFINITIONS

Maximum Contaminant Level (MCL)

The highest permissible level of a contaminant in drinking water. MCL’s 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 no known or expected health risk. MCLGs allow for a margin of safety.

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.

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.

Treatment Technique (TT)

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

Action Level (AL)

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

Inorganic Contaminants

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2008	Barium	0.122	0.086	0.158	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2008	Fluoride	1.49	0.67	2.35	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2008	Nitrate	0.51	0.01	1.02	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2008	Combined Radium 226 & 228	0.61	0.61	0.61	5	0	pCi/L	Erosion of natural deposits.
2008	Gross beta emitters	3.4	3.4	3.4	50	0	pCi/L	Decay of natural and man-made deposits.
2008	Gross alpha	5.9	5.9	5.9	15	0	pCi/L	Erosion of natural deposits.

Organic Contaminants Testing waived, not reported, or none detected

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG Unit of Measure	Source of Disinfectant
2008	Chlorine Residual, Free	0.96	0.4	1.8	4	4 ppm	Disinfectant used to control microbes.

Disinfection Byproducts

Contaminant Year		Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2007	Total Haloacetic Acids	1.3	0	2.6	60	ppb	Byproduct of drinking water disinfection.
2007	Total Trihalomethanes	8.6	0	17.2	80	ppb	Byproduct of drinking water disinfection.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts Waived or not yet sampled

Unregulated Contaminants Not reported or none detected

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2007	Lead	5.5	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2007	Copper	0.18	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Additional Health Information for Lead

All water systems are required by EPA to report the language below starting with the 2009 CCR to be delivered to you by July of 2010. We are providing this information now as a courtesy.

"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>."

San Marcos Surface Water Treatment Plant

Test Results SMSWTP	Chlorine Residual MG/L	Turbidity NTU	Source Water TOC ppm
Minimum	0.7	0.01	0.17
Maximum	2.93	0.18	1.53
Average	1.99	0.02	0.77

Cryptosporidium Monitoring

Test Results SMSWTP	Cryptosporidium	E-coli MPN	Drinking Water TOC ppm	% removal
Minimum	0	1	0.36	
Maximum	1	2	1.46	N/A
Average	0.06	1.5	0.66	

TOC 15% removal N/A based on finished water TOC being below 2 ppm

For more information on the City of San Marcos water treatment, please call 512-393-8010 or view the San Marcos Water Quality report on their website:

<http://www.ci.san-marcos.tx.us/departments/WWW/WaterQualityReports.html>

VIOLATIONS

One water sample in May of 2008 and another in July of 2008 tested positive for coliform. The May sample was post-treatment and the July sample was pre-treatment. The cause was undetermined. Both samples were repeated and results came back negative. Coliform is a non-pathogenic bacteria commonly found in the environment (e.g. soil or vegetation) and is generally harmless. At no time did we fail to take the required number of samples required by TCEQ. The City of Buda Water Department samples our water 108 times per year. At no time was the water quality compromised and it had no impact on public health and safety. The City of Buda will continue to train and comply with all required rules from our monitoring agency.

Turbidity NOT REQUIRED

Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

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
2008 2005	Bicarbonate	315	296	334	NA	ppm	Corrosion of carbonate rocks such as limestone.
2008	Calcium	69.8	65.3	74.3	NA	ppm	Abundant naturally occurring element.
2008 2005	Chloride	15	13	17	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity
2008	Copper	0.002	0	0.003	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
2008	Iron	0.054	0	0.108	.3	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2008	Magnesium	30.7	26.1	35.2	NA	ppm	Abundant naturally occurring element.
2008	Nickel	0.001	0.001	0.002	NA	ppm	Erosion of natural deposits.
2008 2005	pH	7.3	7.2	7.4	>7.0	units	Measure of corrosivity of water.
2008	Sodium	9	7	11	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2008 2005	Sulfate	75	32	117	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2008 2005	Total Alkalinity as CaCO ₃	259	243	274	NA	ppm	Naturally occurring soluble mineral salts.
2008 2005	Total Dissolved Solids	397	329	464	1000	ppm	Total dissolved mineral constituents in water.
2008	Total Hardness as CaCO ₃	301	293	308	NA	ppm	Naturally occurring calcium.
2008	Zinc	0.007	0.007	0.007	5	ppm	Moderately abundant naturally occurring element;