

January 2012 to December 2012

This annual Drinking Water Quality Report provides information on Austin's drinking water. The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers in the country provide a water quality report to their customers on an annual basis.



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The drinking water provided to you in 2012 met all national and state water quality standards. Additional information on test results can be found in the tables at the end of this report. EPA requires water systems to test up to 97 constituents. Only those found are reported here, all others are not detected. For a complete listing of all test parameters please see the City web site www.austintexas.gov/water or call 972-0157.

The Austin City Council meets Thursdays. Information on these meetings can be found by visiting the City's web site, www.austintexas.gov, or calling 974-2210.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en Español, favor de llamar al teléfono 972-0214.

www.austintexas.gov/departament/informe-de-la-calidad-del-agua-potable

City of Austin Water Sources

Customers of the City of Austin Water Utility (Utility) receive their drinking water from two water treatment plants that pump surface water from the Colorado River as it flows into Lake Austin. The City of Austin treats and filters the water according to federal and state standards to remove any possible harmful contaminants.

The sources of drinking water nationwide (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 can be polluted by animals or human activity.

The Colorado River watershed reaches many miles upstream, passing through agricultural and urban areas. Contaminants that may be present in the source water include:

Microbial contaminants, such as viruses and bacteria;

Inorganic contaminants, such as salts and metals;

Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses;

Organic chemicals, from industrial or petroleum use; and **Radioactive materials**, which can be naturally-occurring.

EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems to ensure that tap water is safe to drink. The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more concerns with taste, odor, or color of drinking water, contact the Utility at **972-0021**.

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 the 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 800-426-4791**.

Source Water Assessment

A Source Water Susceptibility Assessment for our drinking water sources 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 our drinking water source based on human activities and natural conditions. Some of this source water assessment information is available later this year on Texas Drinking Water Watch at dww.tceq.texas.gov/DWW/. For more information on source water assessments and water quality information, please contact the **Utility's Water Regulatory Manager at 972-0021**.

Cryptosporidium Testing

All surface water sources are known to be susceptible to contamination by *Cryptosporidium*. Because of this, the Utility monitors for *Cryptosporidium* in the lake water, which is the source of water to the two water treatment plants, and the 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 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 (800-426-4791)**.

Unregulated Contaminant Monitoring

In 2010, Austin's water was tested as part of EPA's Unregulated Contaminant Monitoring Rule. This was to assist EPA in determining the occurrence of contaminants being considered for future regulation. None of the contaminants listed here were detected in Austin's drinking water: Acetochlor, Alachlor, Metolachlor, Acetochlor ethane sulfonic acid, Acetochlor oxanilic acid, Alachlor ESA, Alachlor OA, Metolachlor ESA, Metolachlor OA, N-nitrosodiethylamine, N-nitroso-di-n-butylamine, N-nitroso-di-n-propylamine, N-nitrosomethylethylamine and N-nitrosopyrrolidine.

Drinking Water Regulations

The City of Austin Water Utility was in full compliance with the State of Texas and the EPA national primary drinking water regulations during the 12-month period covered by this report, and we continue to be in compliance.

Fluoride and Infants

Water fluoridated at a level optimal for oral health (as is used in Austin) poses no known health risks for infants. However, some children may develop enamel fluorosis, a cosmetic condition where faint white markings or streaks may appear on the teeth. Fluorosis can affect both baby teeth and permanent teeth while they're forming under the gums.

If you're concerned about fluorosis, you can minimize your baby's exposure to fluoride in several ways. Breastfeeding is the best source of nutrition for infants. If breastfeeding is not possible, you can minimize exposure to fluoride by using ready-to-feed formula. You can also alternate using tap water and nonfluoridated water for formula preparation, or mix powdered or liquid infant formula concentrate with low-fluoride water most or all of the time. However, if you use only nonfluoridated water — such as purified, demineralized, deionized or distilled bottled water — to prepare your baby's formula, your baby's doctor may recommend fluoride supplements beginning at age 6 months.

Additional Parameters

The following are some parameters about which customers commonly have questions:

PARAMETER	MIN	MAX	AVG
Aluminum (mg/l)	.01	.02	.01
Calcium (mg/l)	7	18	12
Chloride (mg/l)	45	45	45
Sodium (mg/l)	24.4	25.4	24.7
Total Hardness (mg/l)	86	121	104
Grains of Hardness (mg/l)	5	7	6

Key for Tables

MCL (maximum contaminant level) - 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.

MCLG (maximum contaminant level goal) - 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.

MRDL (maximum residual disinfectant level) - 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.

MRDLG (maximum residual disinfectant level goal) - 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.

TT (treatment technique) - TT is a required process intended to reduce the level of a contaminant in drinking water.

ppm = parts per million or milligrams per liter (mg/l)

ppb = parts per billion or micrograms per liter (µg/l)

AL (action level) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

ntu = nephelometric turbidity units (a measure of turbidity)

Substance (Sampled for in 2012 unless noted differently)	Highest Level Allowed (EPA's MCL)	City of Austin Drinking Water			Ideal Goals (EPA's MCLG)	Possible Sources
The table below lists all of the federally regulated or monitored constituents which have been found in your drinking water. The results shown here are from the most recent testing done in accordance with regulations.						
Regulated at the Treatment Plant						
		Low	High	Average		
Barium (ppm) (2011)	2	0.01	0.01	0.01	≤ 2	Natural geology, drilling
Fluoride (ppm)	4	0.60	0.62	0.61	≤ 4	Natural geology, supplement
Nitrate (ppm)	10	0.15	0.15	0.15	≤ 10	Runoff from fertilizer use
Combined Radium 226 & 228 (pCi/L) (2011)	5	1	1	1	0	Erosion of Natural Deposits
Turbidity (ntu)-(clarity)	TT 95% of the samples need to be at or below 0.3 ntu	0.02	0.61	0.06	Not applicable	Natural River sediment, runoff
		(99% of the readings were at or below 0.3 ntu)			Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.	
TOC Removal Ratio ¹	Annual avg ≥ 1	0.98	1.99	1.76	Avg ≥ 1	
¹ The TOC removal ratio is the percent of TOC removed through the treatment process divided by the percent of TOC required by TCEQ to be removed. Total organic carbon (TOC) has no adverse health effects. Total organic carbon provides a medium for the formation of disinfection byproducts when water is disinfected. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAAs) which are reported below.						
Regulated in the Distribution System						
Chloramines (mg/l)	4.0 (MRDL)	0.4	3.0	2.03	≤ 4 (MRDLG)	Disinfectant used to control microbes
Haloacetic Acids (5) (ppb)	Yearly Average 60	9.0	28	14.9	Not applicable	Byproduct of drinking water disinfection
Total Coliform % Positive	<5% of all samples positive for each month	0	1.70	0.65	0	Naturally present in the environment
Fecal Coliform (Presence)	A routine sample and a repeat sample are total coliform positive and one is also fecal coliform or E. coli positive	1 sample out of 3373 samples was positive			0	Human and animal fecal waste
Total Trihalomethanes* (ppb)	Yearly average 80	12.0	65.6	35.7	Not applicable	Byproduct of drinking water disinfection
*Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.						
Lead and Copper Testing						
Copper (ppm)	AL=1.3	90% of all samples tested were <.01 ppm. None exceeded 1.3			0	Household plumbing
Lead (ppb)	AL=15	90% of all samples tested were <0.64 ppb. None exceeded 15			0	Household plumbing
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. The Austin Water Utility 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 www.epa.gov/safewater/lead .						
Proposed Standards						
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 the following table. For additional information and data visit www.epa.gov , or call the Safe Drinking Water Hotline at (800) 426-4791.						
Bromodichloromethane (ppb)	Not regulated	3.5	18.4	15.5	NA	Byproduct of drinking water disinfection
Chlorodibromomethane (ppb)	Not regulated	2.0	12.0	8.5	NA	Byproduct of drinking water disinfection
Chloroform (ppb)	Not regulated	7.0	29.7	24.0	NA	Byproduct of drinking water disinfection
N-Nitrosodimethylamine (ppb) (2010)	Not regulated	<0.0021	0.0022	0.0021	NA	Byproduct of manufacturing and present in some foods.