

City of Amarillo 2006 Water Quality Report

Our Drinking Water meets or exceeds All U.S. Environmental Protection Agency (EPA) and State Drinking Water Health Standards. The City of Amarillo's Water Supply has been rated Superior.



Where does my water come from?

Amarillo's water supply comes from surface water and groundwater. The surface water supply is from Lake Meredith. The groundwater supply is from the Ogallala Aquifer. The City's drinking water is a blend of both sources. The purpose of this blend (approximate ratio of 36% lake water to 64% well water) is to adjust mineral content of drinking water within state guidelines. Lake Meredith, our surface water supply, is located approximately 32 miles northeast of Amarillo and the current estimated lake volume is 116,000 acre feet of water. Amarillo receives groundwater from 38 wells in Carson County and 60 wells in Randall and Deaf Smith Counties. The City utilizes a conventional treatment process to supply drinking water and presently has the capacity to treat and supply 121 million gallons of water per day. Daily water production averages between 40-50 million gallons.

Source water assessment and its availability

SURFACE WATER -- The Watershed of Lake Meredith consists primarily of farm and ranch lands; therefore, the susceptibility for surface water contamination is mainly from agricultural practices. Fertilizers, pesticides and other agricultural chemicals, as well as run-off from Confined Animal Feeding Operations (CAFO's), represent potential contamination sources.

GROUNDWATER -- Amarillo's municipal water supply wells are located mostly in farming and ranching areas. Susceptibility for contamination is mainly from agricultural chemicals. Other potential sources of contamination are CAFO's, septic systems, oil field related activities and abandoned private water wells. To help protect our drinking water source, the City has an ongoing Wellhead Protection Program, which is designed to apply TCEQ well standards and guidelines to protect against any pollution entering the underground water.



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 for 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 Crytosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (800-426-4791).

Espanol (Spanish)

Este reporte incluye informacion importante sobre el agua para tomar. Para asistancia en español, favor de llamar al telefono (806) 378-3079.

All Drinking Water May Contain Contaminants

Drinking water, including bottled water, is reasonably expected to contain at least small amounts of some contaminants. However, the presence of contaminants does not necessarily indicate the water poses a health risk. 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 include:

- Microbial contaminants, such as viruses, bacteria and protozoans that 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff and septic systems;
- Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that 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 information on taste, color or odor of drinking water, please contact our business office at the telephone number listed below.



How can I get involved?

By attending and voicing your opinions at meetings of the Amarillo City Commission, you can become involved in the decision-making process affecting our municipal water system. The City Commission regularly meets every Tuesday at 3:00 P. M. on the third floor of City Hall, 509 E. 7th Avenue. You may also contact the City of Amarillo's Utilities Division at the following address and telephone number: (806) 378-4266, TDD (806) 378-4229, PO Box 1971, Amarillo, TX 79105-1971.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For more information contact:
City of Amarillo
Attn: Director of Utilities

PO Box 1971 Amarillo, TX 79105-1971 Phone: (806) 378-4266, TDD (806) 378-4229 Fax: (806) 378-3027

E-mail: steve.miller@ci.amarillo.tx.us Web Address: www.amarillo.gov



Water Quality Data Table

The table below lists drinking water contaminants that were detected by the State of Texas during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from our most recent tests that were performed in 2005. The State of Texas requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently; therefore, some of the data below reflects testing done in 2001 thru 2003.

Important Drinking Water Definitions:

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water which there is no known or expected risk to health.

MCLGs allow for a margin of safety;

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;

TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water;

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

follow.								
2007 CCR Contaminants	MCLG	MCL	Your	Rar	nge	Sample	Violation?	Typical Source
Inorganic Contaminants		-	Water	Low	High	Date		Jr
Arsenic (ppb)	NA	10	2.8	2.1	3.5	07/31/2002	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.158	0.133	0.184	07/31/2002	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Copper (AL, ppm)	1.3	AL=>10% Above 1.3 ppm	100% below AL	0.0107	0.663	2006	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4	4	0.64		0.64	03/29/2006	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (AL, ppb)	0	AL=>10% Above 15 ppb	100% below AL	ND	14	2006	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	.956	.85	1.16	03/29/2006	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)	1	1	< 0.01	ND	< 0.01	08/11/2005	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	4.8	4.1	5.5	07/31/2002	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Microbiological Contamin	nants							
Total Coliform (# of monthly positive samples)	bac	oresence of Colifor Eteria in more that of monthly sample	n 5%			2006	No	Naturally present in the environment (0 detect in 1,514 Amarillo samples)
Turbidity (Conventional or Direct Filtration) [NTU]	NA	TT <=0.3	0.103	0.01	0.4	2005	No	Soil runoff [AL if more than 5% of samples exceed 0.3 NTU] (100% of our samples were below 0.3
Radionuclides								NTU)
Alpha emitters (pCi/L)	0	15	6.1	4.5	8.1	03/02/2005	No	Erosion of natural deposits
Beta/photon emitters (pCi/L)	0	50	8.4	7.7	9.7	03/02/2005	No	Decay of natural and man-made deposits
Combined Radium (pCi/L)	0	5	0.09	< 0.1	0.3	03/02/2005	No	Erosion of natural deposits

2007 CCR (continued)								
Contaminants	MCLG	MCL	Your		nge	Sample	Violation?	Typical Source
Volatile Organic Conta	minants		water	Low	High	Date		
TTHM's [Total Trihalomethanes] (ppb)	NA	80	18.17	ND	72.7	2006	No	By-product of drinking water chlorination
Unregulated Contamin	ants *							
Bromodichloromethane (ppb)	MNR	MNR	10.22	ND	10.52	2006	No	By-product of drinking water chlorination
Bromoform (ppb)	MNR	MNR	9.475	ND	9.53	2006	No	By-product of drinking water chlorination
Chlorodibromomethane (ppb)	MNR	MNR	18.91	ND	19.31	2006	No	By-product of drinking water chlorination
Chloroform (ppb)	MNR	MNR	3.895	ND	4	2006	No	By-product of drinking water chlorination
Halo Acetic Acids: Sur	m of 5 Species	(MCL = 60 p)	pb)					
Monochloroacetic Acid	MNR	MNR	2	ND	8.1	2006	NA	By-product of drinking water chlorination
Dichloroacetic Acid	MNR	MNR	3.1	ND	12.1	2006	NA	By-product of drinking water chlorination
Trichloroacetic Acid	MNR	MNR	1.5	ND	5.8	2006	NA	By-product of drinking water chlorination
Monobromoacetic Acid	MNR	MNR	ND	ND	ND	2005	NA	By-product of drinking water chlorination
Dibromoacetic Acid	MNR	MNR	3.1	ND	12.4	2006	NA	By-product of drinking water chlorination
Disinfectant Residuals	MRDL	MCLG	Highest Average					CINOTHIAUOH
Chlorine disinfectant (ppm)	4	0	1.2	0.28	2.06	2006	No	By-product of drinking water chlorination
Total Organic Carbon			Average					
TOC			3.02	2.69	4.54	2006	No	By-product of drinking water chlorination

^{*} 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.

Units Description:

NA: Not Applicable ND: Not detected

mrem/year: Millirems per year (a measure of radiation absorbed by the body).

MNR: Monitoring not required, but recommended.

ppm: parts per million or milligrams per liter (mg/l). The equivalent of 1/2 or 50% of a dissolved aspirin tablet in one bathtub (about 50 gallons) of water. ppb: parts per billion or micrograms per liter (ug/l). The equivalent of 1/2 of a dissolved aspirin tablet in 1,000 bathtubs (about 50,000 gallons) of water. pCi/L: picocuries per liter (a measure of radioactivity). EPA considers 50pCi/L to be the level of concern for beta particles.

NTU: Nephelometric Turbidity Units (a measure of turbidity). Turbidity measures water treatment plant's efficiency in removing suspended matter from the water.

of monthly positive samples: Number of samples taken monthly that were found to be positive.