



City of Amarillo 2008 Water Quality Report

In 2007, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The Texas Commission on Environmental Quality (TCEQ) has established public water supply system ratings, and Amarillo's water supply system received the highest achievable rating, 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 63% lake water to 37% 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, covers 4,500 acres, and contains at least 26 billion gallons 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.



Do I need to take special precautions?

All reports must prominently display the following language. 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 *Cryptosporidium* 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 asistencia en español, favor de llamar al telefono (806) 378-3079.



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Why are there contaminants in my 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 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.

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 Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.



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: emmett.autrey@amarillo.gov
Web Address: www.amarillo.gov



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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 2007. 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 2002 thru 2007.

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.

| Contaminants | MCLG | MCL | Your Water | Range | | Sample Date | Violation? | Typical Source |
|---|------|--|---------------|--------|--------|-------------|------------|---|
| | | | | Low | High | | | |
| Inorganic Contaminants | | | | | | | | |
| Arsenic (ppb) | NA | 50 | 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 | 0.75 | ---- | 0.75 | 01/30/2007 | 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 | 1.14 | 1.05 | 1.27 | 01/30/2007 | 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 Contaminants | | | | | | | | |
| Total Coliform (# of monthly positive samples) | 2 | presence of Coliform bacteria in more than 5% of monthly samples | 0.0012 | --- | --- | 2007 | No | Naturally present in the environment (0 detect in 1,536 Amarillo samples) |
| Turbidity (Conventional or Direct Filtration) [NTU] | NA | TT <=0.3 | 0.13 avg. | 0.01 | 0.5 | 2007 | No | Soil runoff [AL if more than 5% of samples exceed 0.3 NTU] (99.99% of our samples were below 0.3 NTU) |
| Radionuclides | | | | | | | | |
| 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 |



City of Amarillo 2008 Water Quality Report

| Contaminants | MCLG | MCL | Your water | Range | | Sample Date | Violation? | Typical Source |
|--|-----------------|-----|------------|-------|------|-------------|------------|---|
| | | | | Low | High | | | |
| Volatiles Organic Contaminants | | | | | | | | |
| TTHM's [Total Trihalomethanes] (ppb) | NA chlorination | 80 | 43.2 | ND | 52.2 | 2007 | No | By-product of drinking water chlorination |
| Unregulated Contaminants * | | | | | | | | |
| Bromodichloromethane (ppb) | MNR | MNR | 11.4 | ND | 14.4 | 2007 | No | By-product of drinking water chlorination |
| Bromoform (ppb) | MNR | MNR | 8.2 | ND | 9.0 | 2007 | No | By-product of drinking water chlorination |
| Chlorodibromomethane (ppb) | MNR | MNR | 18.8 | ND | 35.2 | 2007 | No | By-product of drinking water chlorination |
| Chloroform (ppb) | MNR | MNR | 4.9 | ND | 6.6 | 2007 | No | By-product of drinking water chlorination |
| Halo Acetic Acids: Sum of 5 Species | | | | | | | | |
| HAA ₅ (ppb) | N/A | 60 | 7.7 | ND | 12.7 | 2007 | N/A | By-product of drinking water chlorination |
| Unregulated Contaminants* | | | | | | | | |
| Monochloroacetic Acid | MNR | MNR | 5.0 | ND | 9.5 | 2007 | NA | By-product of drinking water chlorination |
| Dichloroacetic Acid | MNR | MNR | ND | ND | ND | 2007 | NA | By-product of drinking water chlorination |
| Trichloroacetic Acid | MNR | MNR | ND | ND | ND | 2007 | NA | By-product of drinking water chlorination |
| Monobromoacetic Acid | MNR | MNR | ND | ND | ND | 2007 | NA | By-product of drinking water chlorination |
| Dibromoacetic Acid | MNR | MNR | 2.7 | ND | 7.8 | 2007 | NA | By-product of drinking water chlorination |
| Disinfectant Residuals | | | | | | | | |
| Chlorine disinfectant (ppm) | 4 | 0 | 1.104 | 0.22 | 2.20 | 2007 | No | By-product of drinking water chlorination |
| Total Organic Carbon | | | | | | | | |
| TOC | | | 2.20 | 0.83 | 5.21 | 2007 | 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 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 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.