



## City of Abilene

# Annual Water Quality Report - 2004

## Covers Calendar Year 2003

This brochure is a snapshot of the quality of the water that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It's important that customers be aware of the efforts that are made continually to improve their water system. To learn more, please attend any of the regularly scheduled meetings which are held the 2<sup>nd</sup> and 4<sup>th</sup> Mondays or 3<sup>rd</sup> & 5<sup>th</sup> of each month. For more information please contact Cliff Gibbs, Public Works Director, 785-263-3510.

Your water comes from the Sand Springs Aquifer well field and the Smoky Hill River well field. We treat your water to remove several contaminants and we also add disinfectant to protect you against microbial contaminants. An assessment of our source water has been completed. For the results of the assessment, please contact us or download the results at [www.kdhe.state.ks.us/nps](http://www.kdhe.state.ks.us/nps).

### A Message From EPA

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. EPA/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 (800-426-4791).

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 (800-426-4791).

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 we treat it 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 stormwater 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 and residential uses.

**\*Radioactive contaminants**, which are naturally occurring.

**\*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.

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

Total Coliform Rule (TCR) - Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. During 2003, we collected eight samples per month.

**WATER QUALITY DATA**

Unless noted, the data presented in this table is from testing done January 1 - December 31, 2003. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

The bottom line is that the water that is provided to you is safe.

**TERMS & ABBREVIATIONS:**

**Maximum Contaminant Level Goal(MCLG):** 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.

**Maximum Contaminant Level (MCL):** the highest level of contaminant that is allowed in drinking water. MCLs are set close to the MCLGs allow for a margin of safety.

**Action Level(AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**N/A:** not applicable **ND:** non detect at testing **ppb:** parts per billion or micrograms per liter **ppm** parts per million or milligrams per liter . **pCi/l:** picocuries per liter(a measure of radiation).

**TESTING RESULTS FOR: CITY OF ABILENE**

REGULATED CONTAMINANTS	COLL DATE	RESULT	UNIT	MCL	MCLG	Vio	TYPICAL SOURCE
Barium	01/02	0.071	ppm	2		2 N	Erosion of natural deposits
Fluoride		0.8	ppm	4		4 N	Additive which promotes strong teeth
Chromium		1	ppb	100		100 N	Erosion of natural deposits
Selenium		2	ppb	50		50 N	Erosion of natural deposits
Nitrate	04/03	2.09	ppm	10		10 N	Erosion of natural deposits

90th PERCENTILE	DATE	RESULT	UNIT	MCL	MCLG	Vio	TYPICAL SOURCE
Lead	09/01	2.7	ppb	AL=15		0 N	Corrosion of household plumbing system.
Copper	09/01	0.1385	ppm	AL=1.3		0 N	Corrosion of household plumbing system.

SECONDARY CONTAM.	DATE	RESULT	UNIT	MCL	MCLG	Vio	TYPICAL SOURCE
Aluminum	01/02	1	ppb	50-200		N	Erosion of natural deposits
Calcium		37	ppm	75-200		N	Erosion of natural deposits
Magnesium		6.01	ppm	50-150		N	Erosion of natural deposits
Sodium		12	ppm	100		N	Erosion of natural deposits
Potassium		2.18	ppm	100		N	Erosion of natural deposits
Chloride		5.68	ppm	250		N	Erosion of natural deposits
Sulfate		20	ppm	250		N	Erosion of natural deposits
Total Hardness		117	ppm	400		N	Erosion of natural deposits
Alkalinity as CaCO3		113	ppm	60-300		N	Erosion of natural deposits
pH		7.79	pH units	6.5-8.5		N	Erosion of natural deposits
Specific Conductivity		293	umho/l	1500		N	Erosion of natural deposits
Tot. Dissolved Solids		173	ppm	500		N	Erosion of natural deposits
Total Phosphorus (P)		0.033	ppm	5.0		N	Erosion of natural deposits
Silica		12	ppm	50		N	Erosion of natural deposits
Corrosivity		0.186	LI	0-+1.0		N	Erosion of natural deposits
Zinc		0.006	ppm	5.0		N	Erosion of natural deposits
Nickel		0.001	ppm	N/A		N	Erosion of natural deposits

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