

2008 Annual Drinking Water Quality Report

Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua para beber. Tradúscalo o hable con alguien que lo entienda bien.

IS OUR WATER SAFE?

Last year your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. The City of Artesia Water Department vigilantly safeguards its water supplies, and we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard during this reporting year. The City of Artesia Water Department also received a Good Housekeeping Award from the Southeast Section in 2007.

IMPORTANT HEALTH INFORMATION

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

WHERE DOES MY WATER COME FROM?

The City of Artesia is supplied by groundwater pumped from seven wells from the Roswell-Artesian basin.

SOURCE WATER ASSESSMENT AND ITS AVAILABILITY

A source water assessment was performed by the New Mexico Environment Department, Drinking Water Bureau in 2003, and this information is available from the City of Artesia and the New Mexico Environment Department. If you would like more information regarding Source Water Protection, please contact Ben Arguijo, of the Drinking Water Bureau's Hobbs Field Office, at (575) 393-4302.

BECOME INVOLVED

We encourage public interest and participation in our community. Regular meetings of the city council are held on the second and fourth Tuesday of the month at 7:00 PM. For more information, call: (575) 746-2122.

DID YOU KNOW.....

- The City of Artesia has over 105 miles of water mains and approximately 5,000 service connections?
- The City of Artesia has completed a 40 year water plan to ensure a safe and adequate water supply for Artesia in the future?
- The City of Artesia plans to construct an additional well and storage tank to accommodate growth?
- The City of Artesia's Water Department staff has over 125 years of combined experience?

WHAT ELSE SHOULD I KNOW?

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 (EPA) 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: microbial contaminants, such as viruses and bacteria, 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, which 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; and radioactive contaminants, which 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 which must provide the same protection for public health.

ADDITIONAL INFORMATION FOR ARSENIC

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected 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 is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
Inorganic Contaminants								
Arsenic (ppb)	0	10	6.5	0.7	6.5	2008	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production
Barium (ppm)	2	2	0.034	0.016	0.034	2008	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	10.4	1.9	10.4	2008	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	1.08	1.04	1.08	2008	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Total Nitrate [nitrate+nitrite measured as Nitrogen] (ppm)	10	10	0.65	0.43	0.65	2008	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	5.5	2.8	5.5	2008	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Thallium (ppb)	0.5	2	0.56	0.08	0.56	2008	No	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories

Microbiological Contaminants

Total Coliform (positive samples/month)	0	1	22	NA		Nov. 2008	Yes	Naturally present in the environment
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Radioactive Contaminants

Alpha emitters (pCi/L)	0	15	2.43	ND	2.43	2006	No	Erosion of natural deposits
Beta/photon emitters (pCi/L)	0	50	2.257	ND	2.257	2006	No	Decay of natural and man- made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Radium (combined 226/228) (pCi/L)	0	5	0.683	ND	0.683	2006	No	Erosion of natural deposits
Uranium (ug/L)	0	30	1.62	1.41	1.62	2006	No	Erosion of natural deposits

<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u># Samples Exceeding AL</u>	<u>Exceeds AL</u>	<u>Typical Source</u>
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Inorganic Contaminants

Copper - action level at consumer taps (ppm)	1.3	1.3	0.1412	2006	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	2.787	2006	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Violations and Exceedances

Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. In November 2008 we failed to properly disinfect after performing maintenance on the Roselawn well. As a result, bacteria infiltrated the water system, and a total of 22 routine, repeat, and special samples tested positive for Total Coliform. The NM Environment Department issued a Maximum Contaminant Level (MCL) Violation to our water system and required special sampling until all samples were clean. Public notification of this violation was distributed to all customers of the water system and was posted at various locations throughout the City of Artesia. The problem was eventually contained, and all samples collected since December 2008 have tested negative for Total Coliform.

Unit Descriptions

<u>Term</u>	<u>Definition</u>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions

<u>Term</u>	<u>Definition</u>
MCLG	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.

MCL	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	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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