

2014 Water Quality Report



Additional Information for Lead

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. City of Aztec 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, visit <http://www.epa.gov/safewater/lead>.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below, please contact us so that we can discuss your connection; if needed, we can survey your connections to the water system and assist you in preventing a cross connection. Devices that can cause a cross-connection to the water system include: A Boiler/Radiant heater (water heaters not included); Underground lawn sprinkler systems; Pool or hot tub (whirlpool tubs not included); Additional source(s) of water on the property; decorative pond; and watering troughs.

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality.

Do I need to take special precautions?

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).

Why are there contaminants in my Drinking Water?

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 storm water 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 storm water 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 storm water 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.

Source water assessment and its availability

As required by the 1996 Safe Drinking Water Act Amendments, the New Mexico Environment Department Drinking Water Bureau has completed a Source Water Assessment and Protection Program (SWAPP) for the City of Aztec. The report includes a determination of the Aztec Domestic Water System's relative susceptibility to contamination. The Susceptibility Analysis of the Aztec Domestic Water System water utility reveals that the utility is well maintained and operated, and sources of drinking water are generally protected from potential sources of contamination based on construction, hydro geologic settings and system operations and management. The susceptibility rank of the entire water system is HIGH. If a system is rated highly susceptible, it does not mean a

customer is or will be consuming contaminated drinking water. The rating reflects the potential for contamination of source water. Not the existence of contaminated drinking water. Please contact the City of Aztec water utility to discuss the findings of the report. Copies may also be requested by e-mailing the Drinking Water Bureau at SWAPP@nmenv.state.nm.us or by calling (505) 827-7536 (toll free 1-877-654-8720). Please include your name, address, telephone number and e-mail address, and the name of the water utility and water system number. NMED-DWP prefers to e-mail copies of the report, and may charge a nominal fee for paper copies.

Where does my water come from?

The City of Aztec is pleased to share this water quality report with you. It describes to you, the customer, the quality of your drinking water. This report covers January 1 through December 31, 2014.

The City of Aztec strives to comply with the strict regulations of both the State of New Mexico and the U.S. Environmental Protection Agency (EPA), which requires all water

suppliers to prepare reports like this every year.

In 2014 our water department distributed 415,432,000 gallons of water to our customers. Our water source is surface water from the Aztec Ditch, Lower Animas Ditch, and the Animas River. The Aztec Ditch runs near Cedar Hill to Aztec High School. It feeds directly into the Lower Reservoir at the treatment plant on Highway 173, east of Highway 550. The lower Animas Ditch runs from Centerpoint to just north of Aztec High School and continues out to South Side River Road. The Animas River runs through the center of town.

Aztec treats your water using coagulation, flocculation, sedimentation, filtration and disinfection to remove or reduce harmful contaminants that may come from the source water.

In 1951 Aztec built a .5 million gallon per day (mgd) plant. In 1954 due to the influx of oil field workers, we built another 1 mgd plant. In 1977 Aztec added a 1.5 mgd plant and closed the original .5 mgd plant. In 1997 a 2-unit treatment plant, which is capable of producing, 4 mgd was added. Our daily demand is usually about 3 mgd in the summer. This

amount is rising as the City grows. We have repaired one older plant and are planning to repair a second plant. Combining all plants together, we are capable of producing 6.5 mgd.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.

For more information contact:

CITY OF AZTEC – Water Plant
201 W. Chaco St., Aztec, NM 87410

Phone: 505-334-7610

Commission Meetings are held bi-monthly and are open to the public. For information on exact dates and times contact the Aztec City Clerk's office at 505-334-7600.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of

<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>			
Disinfectants & Disinfectant By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
TTHMs [Total Trihalomethanes] (ppb)	NA	80	49.5	18.4	49.5	2014	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	NA	60	37.9	41.2	37.9	2014	No	By-product of drinking water chlorination
Chlorine (as Cl ₂) (ppm)	4	4	1.9	.2	3.7	2014	No	Water additive used to control microbes
Inorganic Contaminants								
Fluoride (ppm)	4	4	0.22	NA	NA	2014	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	0	NA	NA	2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Surface Water Contaminants								
Total Organic Carbon(% Removal)	NA	TT	54%	1.2	2.7	2014	No	Naturally present in the environment
Turbidity (NTU)	0.3	0.4	.37	.13	.37	2014	No	Soil runoff
99.9% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.3. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								

Radioactive Contaminants								
Uranium (ug/L)	0	30	1	NA		2013	No	Erosion of natural deposits
Alpha emitters (pCi/L)	0	15	2.1	NA		2013	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>	
Inorganic Contaminants								
Lead - action level at consumer taps (ppb)	0	15	1.3	2013	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Copper - action level at consumer taps (ppm)	1.3	1.3	0.05	2013	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

Unit Descriptions	
Term	Definition
ug/L	ug/L : Number of micrograms of substance in one liter of water
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)
NTU	NTU: Nephelometric Turbidity Units. 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.
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

Important Drinking Water Definitions	
Term	Definition
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