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, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

For more information contact:

CITY OF AZTEC – Water Plant 201 W. Chaco St., Aztec, NM 87410 Phone: 505-334-7610

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



CITY OF AZTEC

2019

Annual

Water Quality Report



Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered.
 Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit <u>www.epa.gov/watersense</u> for more information.

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.

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, 2018. . 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 2019 our water department distributed 574,556,000 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 2.5 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.

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 2018.

	MCI	G	MCL,						
	or		TT, or	Your	Ra	nge	Sample		
Contaminants	MRD	LG N	/IRDLG	Water	Low	High	Date	Violation	Typical Source
Disinfections & 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	51 LRRA	27	51	2019	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	NA		60	30 LRRA	14.5	40	2019	No	By-product of drinking water chlorination
Chlorine (as Cl2) (ppm)	4		4	2.0	1.4	2.3	2019	No	Water additive used to control microbes
Inorganic Contaminan	ts								
Fluoride (ppm)	4		4	0.14	NA	NA	2019	No	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
Barium	2 MG	i/L 2	MG/L	0.059 MG/L	NA	NA	2019	No	Erosion of natural deposits and carried into the streams across the USA.
Nitrate	10 MG,		10 MG/L	<0.05 MG/L	NA	NA	2019	No	Source of nitrate that can include fertilizer, septic systems, animal feedlots, industrial waste, and food processing waste.
Synthetic Organic Con	taminan	ts							
Hexachlorocyclopentadiene		ţ,	50 ppb	0.06 ppb	NA	NA	2017	No	Found in pesticides
Surface Water Contam	ninants								
Turbidity (NTU)	0.3		0.4	0.18	0.06	0.29	2019	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		2016	No	Erosion of natural deposits
Alpha emitters (pCi/L)	0		15	1.3	0.06	1.3	2016	No	Erosion of natural deposits
Combined Radium (pCi/L)			5.0	0.01			2016	No	Radioactive decay of uranium and thorium in rocks and soil
Contaminants	MCLG	AL	Your Wate		nple ate		imples eding AL	Exceeds AL	Typical Source
Inorganic Contaminan	ts								
Lead- Action level at consumer taps (ppm)	0	15	1.9 90th percer		19		0	No	Corrosion of household plumping systems. Erosion of natural deposits
Copper- action level at consumer taps (ppm)	1.3	1.3	0.14 90th percer	20	19		0	No	Corrosion of household plumping systems. Erosion of natural deposits

VIOLATIONS

Our water system violated drinking water requirements over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we are doing (did) to correct these situations.

*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 4_{th} quarter of 2019 we did not monitor or test for disinfection byproducts (Total Trihalomethanes and Haloacetic Acids) and therefore cannot be sure of the quality of your drinking water during that time. *

Table 1 Contaminants	Sample Name	Sampling Frequency	Compliance Period(s)
	(Address)		
Total Trihalomethanes and Haloacetic Acids	HAA5-1	Quarterly	4Q2019
	208 Willow Lane	(2nd month of QTR)	
Total Trihalomethanes and Haloacetic Acids	TTHM-1	Quarterly	4Q2019
	992 Hampton Canyon Road	(2nd month of QTR)	

We failed to test for TTHM's and HAA5's during the correct month of the Quarter. We were required to test in the month of November 2019 and failed to collect the samples until December 2019, The results were TTHM's 26 and 38 mg/L, HAA5,s 13 and 22 mg/L. Maximum Contaminant Level is TTHM's 80 mg/L HAA5's 60 mg/L. Hall Environmental Analysis Laboratory did the testing. If you have any questions about this violation please call 334-8684.

Unit Descriptions	
Term	Definition
ug/L	Number of micrograms of substance in one liter of water
ppm	Parts per million, or milligrams per liter (mg/L)
ppb	Parts per billion, or micrograms per liter ($\mu g/L$)
pCi/L	Picocuries per liter (a measure of radioactivity)
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	Not applicable
ND	Not detected
NR	Monitoring not required, but recommended
MG/L	Milligrams per liter

Important Drinking Water Definitions	
Term	Definition
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below
INICES	which there is no known or expected risk to health. MCLGs allow for a margin of safety.
	Maximum Contaminant Level: The highest level of a contaminant that is allowed in
MCL	drinking water. MCLs are set as close to the MCLGs as feasible using the best available
	treatment technology.
т	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
AL	or other requirements which a water system must follow
Variance and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment
	technique under certain conditions.
	Maximum residual disinfection level goal. The level of a drinking water disinfectant
MRDLG	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
	Maximum residual disinfectant level. The highest level of a disinfectant allowed in
MRDL	drinking water. There is convincing evidence that addition of a disinfectant is necessary
	for control of microbial contaminants
MNR	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level