



# 2018

## Annual Water Quality Report City of Alamogordo



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[www.ci.alamogordo.nm.us](http://www.ci.alamogordo.nm.us)

### Dear Customer

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. Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

### Contaminants and Regulations

The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, 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. Such substances are called contaminants, and may be present in source water as:

**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, that 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** that 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, agricultural application and septic systems

**Radioactive contaminants** which can be naturally occurring or be the result of oil and gas production and mining activities. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 800-426-4791

### Outdoor Watering

Effective May 1st through November 1st the City observes the adopted outdoor watering schedule. If your street number ends in 1, 3, 5, 7, 9 (odd) you may water on Sunday, Wednesday and Friday. If your street number ends in 0, 2, 4, 6, 8 (even) you may water on Tuesday, Thursday and Saturday. Please remember that all watering must take place before 9 am and after 6 pm and is not allowed on Monday.

### Water Quality

Operators from the City of Alamogordo Water Treatment division regularly collect and test water samples from reservoirs and designated sampling points throughout the system to ensure the water delivered to you meets or exceeds federal and state drinking water standards. In 2018, we conducted more than 2800 drinking water tests in the transmission and distribution systems. This in addition to our extensive treatment process control monitoring performed by our certified operators and online instrumentation.

The Susceptibility Analysis reveals that the utility is well maintained and operated, and the sources of drinking water are generally well protected from potential sources of contamination.

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. In order to insure 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.

### Reclaimed Water

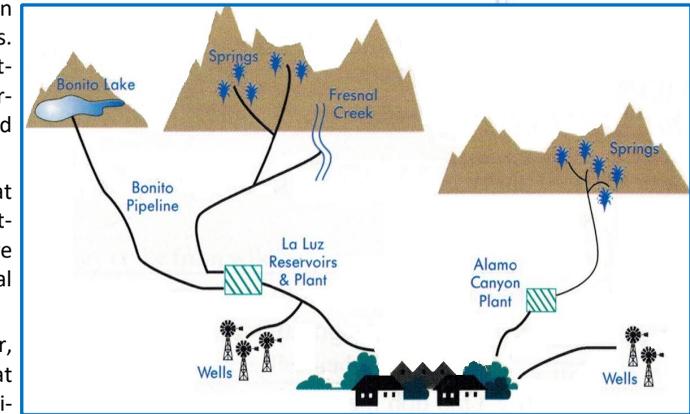
In 2018, irrigation, commercial and school customers in the City of Alamogordo used 816 million gallons of reclaimed water, thereby conserving an equal amount of drinking water. Reclaimed water undergoes and extensive treatment process and is then delivered to landscape irrigation or used for dust control.

### Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 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 USEPA's Safe Drinking Water Hotline 800-426-4791

### Drinking Water Sources

The City's water comes from several sources, depending on seasonal and situational demands and the amount each can produce. The primary source comes from a system of spring compounds, infiltration galleries and stream diversions in the Fresnal and La Luz Canyon systems. The water



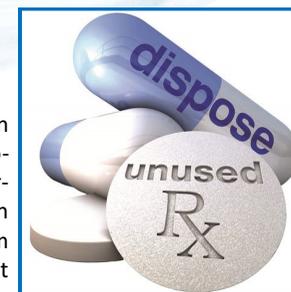
collected from these areas is piped to the City's 188 million gallon raw storage and treatment facility in La Luz. The water is then filtered and disinfected then gravity flows to our customers. On the southern

end of the City, a similar treatment facility receives water piped from the Alamo Canyon System. This facility is not provided with raw water storage, so all water collected is immediately filtered and disinfected then delivered to our customers.

The City also operates ten (10) wells. These wells are operated as necessary to supplement other sources. Operation of the wells generally occurs from about April first through about mid-September.

### Dispose of Unwanted Rx

**Never flush your unused medications down the toilet!** You can help protect our source water and



our environment while helping to keep medications out of the hands of children through proper disposal. Did you know that you can safely discard prescription & over the counter drugs at our local police station? A secure drop box is located in the main lobby of the police station at 700 Virginia Ave. Pills should be in a clear zip lock baggie, mixed together and without bottles. Liquids are not

accepted, but can be poured onto coffee grounds or kitty litter in a plastic grocery bag and thrown in the common household garbage. For syringes, contact the Otero County Public Health office at 1207 8th Street or by calling them at 575-437-9347

## Key Water Terms

**AL:** Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow

**gpg:** Grains Per Gallon: Unit of hardness used for setting water softeners. One gpg equals 17.1 ppm or mg/L of hardness

**LRAA:** Highest Locational Running Annual Average: Arithmetic average of analytical results for samples taken at a specific monitoring location during the previous four calendar quarters

**MCL:** Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology

**MCLG:** Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety

**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

**MRDLG:** Maximum residual disinfectant 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

**ND:** Not detected

**NTU:** Nephelometric Turbidity Unit: a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person

**pCi/L:** picocuries per liter (a measure of radioactivity)

**ppb:** parts per billion, or micrograms per liter (µg/L)

**ppm:** parts per million, or milligrams per liter (mg/L)

**RAA:** Running Annual Average

**SU:** Standard Unit

**TT:** Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water

**ugL:** Number of micrograms of substance in one liter of water

## Get Involved

Public input concerning the City of Alamogordo water system may be made at regularly scheduled meetings, held at 6:30 PM on the second and fourth Tuesday of each month, except for November and December when they are held on the first and third Tuesdays at the City Hall located at 1376 E. Ninth Street. You may also contact the Water Treatment Division at 575-437-5991 with any concerns you may have.

## City of Alamogordo Water Quality Data for 2018

The table below lists all 2018 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits for reporting purposes are not shown, in accord with regulatory guidance. The City holds a three (3) year monitoring waiver for some contaminants and therefore their monitoring frequencies are less than annual.

Contaminant	Unit	Sample Year	MCL	MCLG	Range of Detection	Our Water	Violation	Typical Sources*
<b>Disinfectants &amp; Disinfectant By-Products</b>								
Chlorine	ppm	2018	MRDL=4	MRDLG =4	0.35 -1.65	RAA 1.02	No	1
Haloacetic Acids (HAA5)	ppb	2018	60	N/A	0.5 - 16.0	RAA 12	No	2
TTHM's (Total Trihalomethanes)	ppb	2018	80	N/A	3.1 - 38.0	RAA 31	No	3
<b>Inorganic Contaminants</b>								
Barium	ppm	2018	2	2	.023 -.031	0.031	No	4, 7, 8
Nitrate (measured as Nitrogen)	ppm	2018	10	10	ND -3.3	3.3	No	4, 12, 13
Selenium	ppb	2018	50	50	1.0 - 1.3	1.3	No	4, 14, 15
<b>Radioactive Contaminants</b>								
Radium (combined 226/228)	pCi/L	2013	5	0	.13	.13	No	4
Gross alpha excl. radon and uranium	pCi/L	2013	15	0	.8	.8	No	4
Uranium (ug/L)	ug/L	2013	30	0	4	4	No	4

<b>Lead and Copper (monitored at the customer's plumbing)</b>								
Analyte Name	Unit	Sample Year	AL	90th Percentile	# of samples exceeding AL	MCLG	Violation	Typical Sources*
Lead AL at consumer taps	ppb	2018	15	3	1	0	No	4, 18
Copper AL at consumer taps	ppm	2018	1.3	.56	3	1.3	No	4, 18

<b>Turbidity</b>						
Contaminant	Sample Year	Limit (TT)	Maximum Detected	Violation	Typical Sources*	
Highest single measurement	2018	1 NTU	.31	No	17	
Lowest monthly % meeting limit	2018	0.3 NTU	100%	No	17	

<b>LT2 Round 2 EPA Enhanced Surface Water Monitoring (monitored raw source water before it enters the treatment plants)</b>						
Contaminant	Unit	Sample Year	Range of Detection	Violation	Typical Sources*	
Cryptosporidium	Oocysts/L	2018	< 0.1 - 0.1	N/A	16	
E.coli	MPN	2018	< 1.0 - 87.6	N/A	16	
Turbidity	NTU	2018	0.062 - 0.62	N/A	17	

<b>Microbiological Contaminants</b>							
Contaminant	Sample Year	MCL	MCLG	Level 1 Assessment Trigger	Level Detected (%)	Violation	Typical Sources*
Total Coliform	2018	TT	TT	Exceeds 5.0% TC+ samples in a month	0.00%	No	16
E. coli	2018	One positive sample	0	N/A	0.00%	No	19

## Typical Sources\*

- 1 Water additive used to control microbes
- 2 By-product of drinking water chlorination
- 3 By-product of drinking water disinfection
- 4 Erosion of natural deposits
- 5 Runoff from orchards
- 6 Runoff from glass and electronics production
- 7 Discharge from drilling wastes
- 8 Discharge from metal refineries
- 9 Discharge from steel and pulp mills
- 10 Water additive that promotes strong teeth
- 11 Discharge from fertilizer and aluminum factories
- 12 Runoff from fertilizer use
- 13 Leaching from septic tanks and sewage
- 14 Discharge from petroleum and metal refineries
- 15 Discharge from mines
- 16 Naturally present in the environment
- 17 Soil runoff
- 18 Internal corrosion of household plumbing systems
- 19 Human or animal fecal wastes

## 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. Alamogordo Domestic Water System 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 USEPA's Safe Drinking Water Hotline 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

## General Interest Constituents

Contaminant	Unit	2018 Average
Hardness	ppm	671
Hardness	gpg	39
pH	SU	7.8
Calcium	ppm	177
Magnesium	ppm	54
Potassium	ppm	1.4