2017

Annual Water Quality Report

City of Alamogordo

Published in 2018

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 informacion muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuniquese con alguien que pueda traducer la informacion.

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 2017, we conducted more than 1300 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

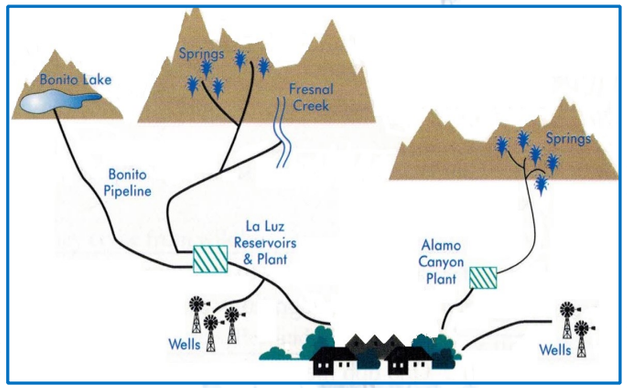
In 2017, irrigation, commercial and school customers in the City of Alamogordo used 792 million gallons of reclaimed water, thereby conserving an equal amount of drinking water. Reclaimed water undergoes and extensive treatment process and is then delivered to landscape irrigation or used for dust control.

Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. 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 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

ND: Not detected

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

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

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

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

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

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

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

Turbidity: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants

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

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

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

RAA: Running Annual Average

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 2017

The table below lists all 2017 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*
Disinfectants & Disinfectant By-Products								
Chlorine	ppm	2017	MRDL=4	MRDLG =4	0.35 -1.6	RAA 0.91	No	1
Haloacetic Acids (HAA5)	ppb	2017	60	N/A	2.6—19	RAA 11	No	2
TTHM's (Total Trihalomethanes)	ppb	2017	80	N/A	18—39	RAA 33	No	3
Inorganic Contaminants								
Arsenic	ppb	2017	10	0	ND - 1.1	1.1	No	4, 5, 6
Barium	ppm	2017	2	2	.013 -.033	0.033	No	4, 7, 8
Chromium	ppm	2017	100	100	ND - 8.5	8.5	No	4, 9
Fluoride	ppm	2017	4	4	ND - 0.2	0.2	No	4, 10, 11
Nitrate (measured as Nitrogen)	ppm	2017	10	10	ND -3.1	3.1	No	4, 12, 13
Selenium	ppb	2017	50	50	1.2 - 3.6	3.6	No	4, 14, 15
Radioactive Contaminants								
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

Turbidity	Sample Year	Limit (TT)	Maximum Detected	Violation	Typical Sources*
Highest single measurement	2017	1 NTU	.14	No	2
Lowest monthly % meeting limit	2017	0.3 NTU	100%	No	2

Lead and Copper (regulated at the customer's plumbing)

Analyte Name	Unit	Sample Year	AL	90th Percentile	# of samples exceeding AL	MCLG	Violation	Typical Sources*
Lead AL at consumer taps	ppb	2015	15	4.8	1	0	No	4, 18
Copper AL at consumer taps	ppm	2015	1.3	.53	0	1.3	No	4, 18

LT2 Round 2 EPA Enhanced Surface Water Monitoring (24 month sampling began October 2016—To be completed September 2018)

La Luz Surface Water Treatment Plant - Cryptosporidium ND

Alamo Surface Water Treatment Plant - Cryptosporidium ND

Microbiological Contaminants

Contaminant	Sample Year	MCL	MCLG	Level 1 Assessment Trigger	Level Detected (%)	Violation	Typical Sources*
Total Coliform	2017	TT	TT	Exceeds 5.0% TC+ samples in a month	0.00%	No	16
E. coli	2017	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.

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.