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# 2011 Annual Drinking Water Quality Report

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For  
Holloman AFB

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## (Public Water System Identification (PWSID) NM3562719)

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This report is an annual snapshot of the drinking water quality delivered by Holloman AFB. Under the “Consumer Confidence Reporting Rule” of the Environmental Protection Agency’s Safe Drinking Water Act (SDWA), community water systems are required to report this water quality information to the consuming public. Presented in this report is information on the source of our water and where it comes from, what it contains, how it compares to state and federal standards, and the health risks associated with any contaminants. We are committed to providing you with information because customers are our best allies.

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### I. PUBLIC WATER SYSTEM INFORMATION

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**Water System Improvements:**

Our water system is routinely inspected by the Civil Engineering Utilities Shop and Bioenvironmental Engineering (BE) of the 49<sup>th</sup> Medical Group. Civil Engineering Utilities inspects our system for its technical, financial and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, our water system is operated by Holloman certified operators who oversee the routine operations of our system. All improvements forthcoming will be addressed by the appropriate personnel.

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### II. YOUR DRINKING WATER SOURCE

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Holloman AFB relies on surface water (40 percent) and groundwater (60 percent) for potable water. Holloman AFB is provided potable water by the City of Alamogordo and various wells located 12 to 35 miles Southeast of the base near the foothills of the Sacramento Mountains. Surface water from Bonito Lake and natural springs located in Fresnel and La Luz Canyons is transported through pipelines to reservoirs at the City of Alamogordo’s La Luz water treatment plant. The La Luz water treatment facility transports treated water to the new prather line The Prather pipeline transports the water to a connection with the main pipelines that supply water to the Base.

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Holloman’s licensed treatment operators treat the water through a process called primary disinfection. The only treatment provided at Holloman AFB is additional disinfection and water softening. No fluoride addition is required because there is sufficient naturally occurring fluoride in the groundwater. Disinfection using chlorine gas currently occurs at the base water treatment plant (WTP) and additional disinfection takes place at the North end of the base via a MIOX unit.

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### III. TYPES OF SUBSTANCES THAT MAY BE FOUND IN TAP WATER

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**Microbial contaminants** -such as viruses and bacteria, which 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 agricultural or 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.

**Radioactive contaminants** - can be naturally occurring or be the result of oil and gas production and mining activities.

## IV.

## WATER QUALITY TESTING RESULTS

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. The EPA and State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Table 1. Holloman AFB 2011 Sampling Results

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Our Water	Range		Sample Year	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial								
TTHMs [Total Trihalomethanes] (ppb)	NA	80	29.2	ND	29.2	2011	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	NA	60	ND	ND	ND	2011	No	By-product of drinking water chlorination
<b>Inorganic Contaminants</b>								
Asbestos (MFL)	7	7	0.2	NA	NA	2011	No	Decay of asbestos cement water mains; Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	0.75	NA	NA	2011	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)	1	1	0.75	NA	NA	2011	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Microbiological Contaminants</b>								
Total Coliform (positive samples/month)	0	1	0	NA	NA	2011	No	Naturally present in the environment
<b>Radioactive Contaminants</b>								
Radium (combined 226/228) (pCi/L)	0	5	0.31	NA	NA	2011	No	Erosion of natural deposits



<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter ( $\mu\text{g/L}$ )
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
MFL	MFL: million fibers per liter, used to measure asbestos
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
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.
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.

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V.

EDUCATIONAL INFORMATION

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**Q. How would I know about a problem with the water supply?**

A. BE and Water Utilities regularly test and inspect the water supply and the distribution system. If a problem was found, all affected people would be notified through leaflets, email, and the base newspaper.

**Q. My water tastes and smells funny. Is it safe to drink?**

A. According to the EPA, you can safely drink and cook with the water. Algae can cause water to have a “funny” smell and odor. Algae are normal, harmless plants that appear in the reservoirs at certain times of the year. On occasion, customers may also taste or smell the low levels of chlorine compounds added to disinfect the water. Fill a jug with tap water and put it in the refrigerator to get rid of the taste and odor.

**Q. My water is cloudy sometimes but then clears up. Can I drink it?**

A. You can safely drink and cook with the water. Water travels under pressure throughout the system. Occasionally, air can become trapped in the water in tiny bubbles, causing water to look cloudy. This is only temporary and the water clears up in a short time.

**Q. My water is discolored sometimes. Can I drink it?**

A. According to EPA, you can safely drink and cook with the water. Old iron pipes in your area can cause a red, brown, or yellow color in the water. A yellow color is from iron that is absorbed by water that has been sitting in pipes for a long time. A red or brown color is caused by very small specks of iron. These specks of iron can enter the water if there is quick change in water speed or direction in your local pipes. Such changes can result from valve repair, flushing the system or the testing or use of fire hydrants. Flushing the water in your pipes sometimes will clear this up.

**Q. Do I need to take special precautions?**

A. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as people with cancer undergoing chemotherapy, people 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 Drinking Water Hotline (800-426-4791).

**Q: How is my water being treated?**

A: Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

**Q: How Can I help?**

A: 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.
- Water plants only when necessary.
- 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 [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information.

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#### **Additional Information About 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. Holloman AFB is responsible for providing high quality drinking water that is tested for lead as required by sampling plans approved by NM EPA, 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>.

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