# 2014 Annual Drinking Water Quality Report for Holloman AFB Public Water System ID: NM3562719

**Spanish (Espanol)**

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

**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. We are committed to providing you with information because informed customers are our best allies.

**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).

**Where does my water come from?**

Holloman AFB (HAFB) normally relies on surface water (40 percent) and groundwater (60 percent) for potable water, but due to the 2012 Little Bear Forest fire the surface water source is expected to be unavailable until late 2017 or early 2018.Holloman AFB will be relying on various wells located 12 to 35 miles southeast of the base near the foothills of the Sacramento Mountains for the next 3+years.

Two tanks are designated for potable water storage on HAFB: Eagle Tower with a capacity of 0.3 million gallons (MG) (0.9 acre-feet) and North Area Tower with a capacity of 0.25 MG (0.8 acre-feet), having a total capacity of 0.55 MG (1.7 acre-feet). The previously used Challenger Tank with a capacity of 0.4 MG (1.2 acre-feet) has been permanently removed from service. These tanks also serve to keep pressure in pipelines serving the base and are constantly being filled by water pumped via pipeline from two main storage tanks of 1.0 MG and 1.5 MG located at the CE Water Treatment Plant.

Groundwater is drawn from a total of 15 wells with an average depth of 450 to 550 feet. There are four well fields in operation, Boles, Escondido, San Andres, and Frenchy, The Douglas well field, which currently has no operating wells, is awaiting funds for the drilling of 4 replacement wells.. Groundwater extracted from the well fields is transported via pipeline to two ground level storage tanks located in Boles and San Andres well fields, with a total capacity of 0.9 MG. These water storage tanks are constantly being filled to prevent water deficits from occurring on -base. Ten years ago, average daily water demand on-base was approximately 2.1 million gallons per day (MGD) (6.4 acre-feet) or 751.4 MG per year. The average for 2014 was 1.08 MGD or 393.1 MG per year. . This very significant reduction in water consumption is the result of converting the Golf Course to irrigation with treated effluent, an aggressive campaign to find/fix leaks and replacement of 5 miles of old cast iron water mains. The replacement of old leaky water lines are continuing, thus the Base water consumption is continuing to drop.

**Source water assessment and its availability**

Our water system is routinely inspected by the Civil Engineering Water And Fuels System Maintenance Shop and Bioenvironmental Engineering (BE) of the 49th Medical Group. Civil Engineering Water and Fuels System Maintenance 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 state certified operators who oversee the routine operations of our system. All improvements forthcoming will be addressed by the appropriate personnel.

**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 stormwater 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 stormwater 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 stormwater 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.

**How can I get involved?**

N/A

**Description of Water Treatment Process**

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.

**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.
- 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 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.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

**Monitoring and reporting of compliance data violations**

Please see attachments.

**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. Holloman AFB (PWSID: NM3562719) 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.

# 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 the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

| | MCLG | MCL, | | | | | |
|---|---|---|---|---|---|---|---|

| Contaminants | or MRDLG | TT, or MRDL | Your Water | Range Low | Range High | Sample Date | Violation | Typical Source |
|---|---|---|---|---|---|---|---|---|
| **Disinfectants & Disinfectant By-Products** | | | | | | | | |
| (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) | | | | | | | | |
| Haloacetic Acids (HAA5) (ppb) | NA | 60 | 5.5 | ND | 5.5 | 2014 | No | By-product of drinking water chlorination |
| TTHMs [Total Trihalomethanes] (ppb) | NA | 80 | 23.1 | ND | 23.1 | 2014 | No | By-product of drinking water disinfection |
| **Inorganic Contaminants** | | | | | | | | |
| Nitrate [measured as Nitrogen] (ppm) | 10 | 10 | 0.5 | 0.5 | 0.5 | 2014 | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Fluoride (ppm) | 4 | 4 | 0.74 | NA | | 2014 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Sodium (optional) (ppm) | | MPL | 45 | NA | | 2012 | No | Erosion of natural deposits; Leaching |
| Barium (ppm) | 2 | 2 | 0.022 | NA | | 2012 | No | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Lead - source water (ppb) | | 15 | 3.9(MPL) | NA | | 2012 | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| Copper - source water (ppb) | | 1300 | 8.8(MPL) | NA | | 2012 | No | Corrosion of household plumbing systems; Erosion of natural deposits |
| **Radioactive Contaminants** | | | | | | | | |
| Radium (combined 226/228) (pCi/L) | 0 | 5 | 1.12 | NA | | 2014 | No | Erosion of natural deposits |
| Uranium (ug/L) | 0 | 30 | 1.8 | NA | | 2014 | No | Erosion of natural deposits |
| Alpha emitters (pCi/L) | 0 | 15 | 4.2 | NA | | 2011 | No | Erosion of natural deposits |
| Beta/photon emitters (pCi/L) | 0 | 50 | 1.2 | NA | | 2011 | No | Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles. |
| **Synthetic organic contaminants including pesticides and herbicides** | | | | | | | | |
| Acrylamide | NA | TT | NA | NA | | 2014 | No | Added to water during sewage/wastewater treatment |

| Contaminants | MCLG | AL | Your Water | Sample Date | # Samples Exceeding AL | Exceeds AL | Typical Source |
|---|---|---|---|---|---|---|---|
| **Inorganic Contaminants** | | | | | | | |
| Lead - action level at consumer taps (ppb) | 0 | 15 | 5.3 | 2013 | 1 | No | Corrosion of household plumbing systems; Erosion of natural deposits |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Copper - action level at consumer taps (ppm) | 1.3 | 1.3 | 0.17 | 2013 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits |

# Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

| Contaminants | MCLG or MRDLG | MCL or MRDL | Your Water | Violation | Typical Source |
|---|---|---|---|---|---|
| Nitrite [measured as Nitrogen] (ppm) | 1 | 1 | ND | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Cyanide [as Free Cn] (ppb) | 200 | 200 | ND | No | Discharge from plastic and fertilizer factories; Discharge from steel/metal factories |
| 2,4-D (ppb) | 70 | 70 | ND | No | Runoff from herbicide used on row crops |
| Dalapon (ppb) | 200 | 200 | ND | No | Runoff from herbicide used on rights of way |
| Pentachlorophenol (ppb) | 0 | 1 | ND | No | Discharge from wood preserving factories |
| Picloram (ppb) | 500 | 500 | ND | No | Herbicide runoff |
| 2,4,5-TP (Silvex) (ppb) | 50 | 50 | ND | No | Residue of banned herbicide |
| Dioxin (2,3,7,8-TCDD) (ppq) | 0 | 30 | ND | No | Emissions from waste incineration and other combustion; Discharge from chemical factories |
| Chlordane (ppb) | 0 | 2 | ND | No | Residue of banned termiticide |
| Toxaphene (ppb) | 0 | 3 | ND | No | Runoff/leaching from insecticide used on cotton and cattle |
| Dinoseb (ppb) | 7 | 7 | ND | No | Runoff from herbicide used on soybeans and vegetables |
| Dibromochloropropane (DBCP) (ppt) | 0 | 200 | ND | No | Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards |
| Ethylene dibromide (ppt) | 0 | 50 | ND | No | Discharge from petroleum refineries |
| Alachlor (ppb) | MNR | MNR | ND | No | |
| Atrazine (ppb) | 3 | 3 | ND | No | Runoff from herbicide used on row crops |
| Benzo(a)pyrene (ppt) | 0 | 200 | ND | No | Leaching from linings of water storage tanks and distribution lines |
| Lindane (ppt) | 200 | 200 | ND | No | Runoff/leaching from insecticide used on cattle, lumber, gardens |
| Di (2-ethylhexyl) adipate (ppb) | 400 | 400 | ND | No | Discharge from chemical factories |
| Di (2-ethylhexyl) phthalate (ppb) | 0 | 6 | ND | No | Discharge from rubber and chemical factories |
| Endrin (ppb) | 2 | 2 | ND | No | Residue of banned insecticide |
| Heptachlor (ppt) | 0 | 400 | ND | No | Residue of banned pesticide |

| | | | | | |
|---|---|---|---|---|---|
| Heptachlor epoxide (ppt) | 0 | 200 | ND | No | Breakdown of heptachlor |
| Hexachlorobenzene (ppb) | 0 | 1 | ND | No | Discharge from metal refineries and agricultural chemical factories |
| Hexachlorocyclopentadiene (ppb) | 50 | 50 | ND | No | Discharge from chemical factories |
| Methoxychlor (ppb) | 40 | 40 | ND | No | Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock |
| Simazine (ppb) | 4 | 4 | ND | No | Herbicide runoff |
| Carbofuran (ppb) | 40 | 40 | ND | No | Leaching of soil fumigant used on rice and alfalfa |
| Oxamyl [Vydate] (ppb) | 200 | 200 | ND | No | Runoff/leaching from insecticide used on apples, potatoes and tomatoes |
| Endothall (ppb) | 100 | 100 | ND | No | Runoff from herbicide use |
| Glyphosate (ppb) | 700 | 700 | ND | No | Runoff from herbicide use |
| Diquat (ppb) | 20 | 20 | ND | No | Runoff from herbicide use |
| Antimony (ppb) | 6 | 6 | ND | No | Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition. |
| Arsenic (ppb) | 0 | 10 | ND | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| Beryllium (ppb) | 4 | 4 | ND | No | Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries |
| Cadmium (ppb) | 5 | 5 | ND | No | Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints |
| Chromium (ppb) | 100 | 100 | ND | No | Discharge from steel and pulp mills; Erosion of natural deposits |
| Selenium (ppb) | 50 | 50 | ND | No | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines |
| Thallium (ppb) | 0.5 | 2 | ND | No | Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories |
| Mercury [Inorganic] (ppb) | 2 | 2 | ND | No | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland |
| Benzene (ppb) | 0 | 5 | ND | No | Discharge from factories; Leaching from gas storage tanks and landfills |
| Carbon Tetrachloride (ppb) | 0 | 5 | ND | No | Discharge from chemical plants and other industrial activities |
| Chlorobenzene (monochlorobenzene) (ppb) | 100 | 100 | ND | No | Discharge from chemical and agricultural chemical factories |
| o-Dichlorobenzene (ppb) | 600 | 600 | ND | No | Discharge from industrial chemical factories |
| p-Dichlorobenzene (ppb) | 75 | 75 | ND | No | Discharge from industrial chemical factories |

| | | | | | |
|---|---|---|---|---|---|
| 1,2-Dichloroethane (ppb) | 0 | 5 | ND | No | Discharge from industrial chemical factories |
| 1,1-Dichloroethylene (ppb) | 7 | 7 | ND | No | Discharge from industrial chemical factories |
| cis-1,2-Dichloroethylene (ppb) | 70 | 70 | ND | No | Discharge from industrial chemical factories |
| trans-1,2-Dichloroethylene (ppb) | 100 | 100 | ND | No | Discharge from industrial chemical factories |
| Dichloromethane (ppb) | 0 | 5 | ND | No | Discharge from pharmaceutical and chemical factories |
| 1,2-Dichloropropane (ppb) | 0 | 5 | ND | No | Discharge from industrial chemical factories |
| Ethylbenzene (ppb) | 700 | 700 | ND | No | Discharge from petroleum refineries |
| Styrene (ppb) | 100 | 100 | ND | No | Discharge from rubber and plastic factories; Leaching from landfills |
| Tetrachloroethylene (ppb) | 0 | 5 | ND | No | Discharge from factories and dry cleaners |
| Toluene (ppm) | 1 | 1 | ND | No | Discharge from petroleum factories |
| 1,2,4-Trichlorobenzene (ppb) | 70 | 70 | ND | No | Discharge from textile-finishing factories |
| 1,1,1-Trichloroethane (ppb) | 200 | 200 | ND | No | Discharge from metal degreasing sites and other factories |
| 1,1,2-Trichloroethane (ppb) | 3 | 5 | ND | No | Discharge from industrial chemical factories |
| Trichloroethylene (ppb) | 0 | 5 | ND | No | Discharge from metal degreasing sites and other factories |
| Vinyl Chloride (ppb) | 0 | 2 | ND | No | Leaching from PVC piping; Discharge from plastics factories |
| Xylenes (ppm) | 10 | 10 | ND | No | Discharge from petroleum factories; Discharge from chemical factories |
| Asbestos (MFL) | 7 | 7 | ND | No | Decay of asbestos cement water mains; 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) |
| ppt | ppt: parts per trillion, or nanograms per liter |
| ppq | ppq: parts per quadrillion, or picograms per liter |
| pCi/L | pCi/L: picocuries per liter (a measure of radioactivity) |
| MFL | MFL: million fibers per liter, used to measure asbestos concentration |
| 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 |

**For more information please contact:**

Contact Name: SrA Jaclyn Cardona
Address:
280 First Street
Holloman AFB, NM 88330
Phone: 575-572-7938
E-Mail: bio.request@holloman.af.mil

# PUBLIC NOTICE
# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER
## Monitoring Requirements Not Met for Holloman Air Force Base

The Holloman AFB water system violated a drinking water sampling standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing.

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 August 2014, we conducted required source water monitoring at the active wells for Holloman AFB following a Total Coliform positive sample. Although we conducted these samples, the number of active wells on file with the New Mexico Environment Department did not match what was actually active at the time. Thus, we did not sample all active wells on file in a designated timeframe, and therefore, cannot be sure of the quality of our drinking water during that timeframe. Note that the follow-up samples that occurred were negative for any Total Coliform.

What should you do?
There is nothing you need to do at this time.

What does this mean?
One requirement of public water systems is the periodic monitoring of tap water for the presence of bacterial contaminants. Whenever our water system has a routine Total Coliform-positive sample, we are required by law to conduct source water monitoring within 24 hours of notification.

Date your system came into compliance: 7 August 2014
(Note: Return To Compliance was achieved once the system conducted triggered source water monitoring of each of the ground water sources in use at the time of the Total Coliform Positive)

What is being done?
In order to prevent this from happening again, our Civil Engineering department will inform the New Mexico Environment Department of all active wells in a timely manner to avoid any confusion.

For more information, please contact Jaclyn Cardona at 575-572-7938 or 280 First Street, Holloman AFB NM 88330.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by: posting this notice in a public place, distributing copies by hand or mail, posting on the Internet, and advertising in the news media/newspaper.