

# **2024 Annual Drinking Water Quality Report for Holloman AFB Public Water System ID: NM3562719**

## **Is my water safe?**

Yes! 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 tentatively unavailable until 2025. Until the surface water source is available again, Holloman AFB will be relying on various wells located 12 to 35 miles southeast of the base near the foothills of the Sacramento Mountains.

Groundwater is drawn from 16 wells with an average depth of 450 to 550 feet. There are five well fields in operation, Boles, Escondido, San Andres, Frenchy, and Douglas. 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 million gallons (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 1.2 million gallons per day (MGD) or 438 MG per year.

Water is treated at the Civil Engineer Water Treatment Plant and is stored in two main storage tanks (1.0 MG and 1.5 MG). The water is then distributed out to the water system to include two elevated tanks (Eagle Tower with a capacity of 0.3 MG and North Area Tower with a capacity of 0.25 MG, having a total capacity of 0.55 MG. These tanks also serve to keep pressure in pipelines serving the base and are constantly filled.

### **Source water assessment and its availability**

Our water system is routinely inspected by both the Civil Engineer Squadron's Water and Fuels System Maintenance (WFSM) Shop and Bioenvironmental Engineering (BE). The WFSM shop 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 maintained by state certified operators who oversee the routine operations of our system. All forthcoming improvements to the water system will be addressed by the appropriate personnel. For a copy of the source water assessment, consumers can contact **the Drinking Water Bureau at 505-476-8620 or toll free 1-877-654-8720.**

### **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?**

The information contained in the Consumer Confidence Report may not answer all the questions you may have about the quality of the Holloman AFB's drinking water. You are welcome to contact the Bioenvironmental Engineering Flight at (575) 572-7938. Your concerns will be addressed in the monthly Water Working Group meeting.

### **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](http://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.

### **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. 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>. Additionally, a lead service line inventory was conducted in 2024. The distribution system at Holloman AFB has no lead, galvanized requiring replacement piping, or lead status unknown service lines, no known lead connectors, and no connectors of unknown material. For questions regarding the results of this inventory, consumers can reach out to the Bioenvironmental Engineering office at 575-572-7938.

### Additional Information for Arsenic

While your drinking water meets the EPA's standard for arsenic, it does contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The 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.

## Water Quality Data Table

In order to ensure that tap water is safe to drink, The EPA prescribes regulations which limit the number of contaminants in water provided by public water systems. The table below lists all 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 in the “Terms and Definitions” section of this document.

[illegible]

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect In Your Water	Range of Levels Detected	Sample Date	Violation	Typical Source
Barium (ppm)	2	2	0.021	0.021 - 0.021	2024	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.46	0.31 - 0.46	2024	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (mg/L) [measured as Nitrogen]	10	10	0.85	0.85 - 0.85	2024	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	2.2	2.2 - 2.2	2024	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (optional) (ppm)	NA	NA	50	50 - 50	2024	No	Erosion of natural deposits; Leaching
Arsenic (ppb)	0	10	1.3	1.3 - 1.3	2024	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
<b>Radioactive Contaminants</b>							
Alpha emitters (pCi/L)	0	15	ND	NA	2023	No	Erosion of natural deposits
Beta/photon emitters (mrem/yr)	0	15	1.9	1.9 - 1.9	2022	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Radium (combined 226/228) (pCi/L)	0	5	ND	NA	2023	No	Erosion of natural deposits
Uranium (ug/L)	0	30	0.0026	0.0026 - 0.0026	2023	No	Erosion of natural deposits

Contaminants	MCLG	AL	Detect in Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
<b>Inorganic Contaminants</b>							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.09	2022	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0.87	2022	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, TT, or MRDL	Detect in Your Water	Violation	Typical Source
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
1,2,4-Trichlorobenzene (ppb)	70	70	ND	No	Discharge from textile-finishing factories
1,2-Dichloroethane (ppb)	0	5	ND	No	Discharge from industrial chemical factories
1,2-Dichloropropane (ppb)	0	5	ND	No	Discharge from industrial chemical factories
1-butanol (ug/L)	NA	NA	ND	No	
2,4,5-TP (Silvex) (ppb)	50	50	ND	No	Residue of banned herbicide
2,4-D (ppb)	70	70	ND	No	Runoff from herbicide used on row crops
2-methoxyethanol (ug/L)	NA	NA	ND	No	
2-propen-1-ol (ug/L)	NA	NA	ND	No	
Alachlor (ppb)	0	2	ND	No	Runoff from herbicide used on row crops
Antimony (ppb)	6	6	ND	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Asbestos (MFL)	7	7	ND	No	Decay of asbestos cement water mains; Erosion of natural deposits

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Violation	Typical Source
Atrazine (ppb)	3	3	ND	No	Runoff from herbicide used on row crops
Benzene (ppb)	0	5	ND	No	Discharge from factories; Leaching from gas storage tanks and landfills
Benzo(a)pyrene (ppt)	0	200	ND	No	Leaching from linings of water storage tanks and distribution lines
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
Carbofuran (ppb)	40	40	ND	No	Leaching of soil fumigant used on rice and alfalfa
Carbon Tetrachloride (ppb)	0	5	ND	No	Discharge from chemical plants and other industrial activities
Chlordane (ppb)	0	2	ND	No	Residue of banned termiticide
Chlorobenzene (monochlorobenzene) (ppb)	100	100	ND	No	Discharge from chemical and agricultural chemical factories
Chromium (ppb)	100	100	ND	No	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb)	200	200	ND	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Dalapon (ppb)	200	200	ND	No	Runoff from herbicide used on rights of way
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
Dibromochloropropane (DBCP) (ppt)	0	200	ND	No	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dichloromethane (ppb)	0	5	ND	No	Discharge from pharmaceutical and chemical factories
Dinoseb (ppb)	7	7	ND	No	Runoff from herbicide used on soybeans and vegetables



Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Violation	Typical Source
Dioxin (2,3,7,8-TCDD) (ppq)	0	30	ND	No	Emissions from waste incineration and other combustion; Discharge from chemical factories
Diquat (ppb)	20	20	ND	No	Runoff from herbicide use
Endothall (ppb)	100	100	ND	No	Runoff from herbicide use
Endrin (ppb)	2	2	ND	No	Residue of banned insecticide
Ethylbenzene (ppb)	700	700	ND	No	Discharge from petroleum refineries
Ethylene dibromide (ppt)	0	50	ND	No	Discharge from petroleum refineries
Glyphosate (ppb)	700	700	ND	No	Runoff from herbicide use
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
Lindane (ppt)	200	200	ND	No	Runoff/leaching from insecticide used on cattle, lumber, gardens
Mercury [Inorganic] (ppb)	2	2	ND	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Methoxychlor (ppb)	40	40	ND	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)	200	200	ND	No	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes
PCBs [Polychlorinated biphenyls] (ppt)	0	500	ND	No	Runoff from landfills; Discharge of waste chemicals
Pentachlorophenol (ppb)	0	1	ND	No	Discharge from wood preserving factories
Picloram (ppb)	500	500	ND	No	Herbicide runoff
Simazine (ppb)	4	4	ND	No	Herbicide runoff
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
Thallium (ppb)	.5	2	ND	No	Discharge from electronics, glass, and leaching from ore-processing sites; drug factories

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Violation	Typical Source
Toluene (ppm)	1	1	ND	No	Discharge from petroleum factories
Toxaphene (ppb)	0	3	ND	No	Runoff/leaching from insecticide used on cotton and cattle
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
alpha-hexachlorocyclohexane (ug/L)	NA	NA	ND	No	
butylated hydroxyanisole (ug/L)	NA	NA	ND	No	
chlorpyrifos (ug/L)	NA	NA	ND	No	
cis-1,2-Dichloroethylene (ppb)	70	70	ND	No	Discharge from industrial chemical factories
dimethipin (ug/L)	NA	NA	ND	No	
ethoprop (ug/L)	NA	NA	ND	No	
germanium (ug/L)	NA	NA	ND	No	
manganese (ug/L)	NA	NA	ND	No	
o-Dichlorobenzene (ppb)	600	600	ND	No	Discharge from industrial chemical factories
o-toluidine (ug/L)	NA	NA	ND	No	
oxyfluorfen (ug/L)	NA	NA	ND	No	
p-Dichlorobenzene (ppb)	75	75	ND	No	Discharge from industrial chemical factories
profenofos (ug/L)	NA	NA	ND	No	
quinoline (ug/L)	NA	NA	ND	No	
tebuconazole (ug/L)	NA	NA	ND	No	
total permethrin (cis- & trans-) (ug/L)	NA	NA	ND	No	
trans-1,2-Dichloroethylene (ppb)	100	100	ND	No	Discharge from industrial chemical factories
tribufos (ug/L)	NA	NA	ND	No	

# PFAS Monitoring

## What are per- and polyfluoroalkyl substances and where do they come from?

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industrial and consumer products around the globe, including in the U.S., since the 1940s. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, food packaging, and cookware. They are also contained in some fire-fighting foams such as aqueous film-forming foam, or AFFF, used for fighting petroleum fires.

## Is there a federal regulation for PFAS in drinking water?

Yes. On April 26, 2024, the Environmental Protection Agency (EPA) published a final National Primary Drinking Water Regulation for certain per- and polyfluoroalkyl substances (PFAS) under the Safe Drinking Water Act (SDWA). This rule went into effect on June 25, 2024 with a compliance deadline of April 26, 2029, five years from the date of publication. While the rule requires routine sampling for certain PFAS by no later than 2027, DoD has been sampling drinking water for PFAS compounds at all DoD-owned and operated water systems since 2017. Under the new rule, the following limits, called Maximum Contaminant Levels (MCL), were established, and DoD water systems will need to meet these levels by April 2029.

PFAS	MCL
PFOA	4.0 ppt
PFOS	4.0 ppt
PFHxS	10 ppt
HFPO-DA (GenX)	10 ppt
PFNA	10 ppt
PFBS	n/a
Mixture of two or more: PFHxS, PFNA, HFPO-DA, and PFBS	HI of 1 (unitless)

For systems where DoD provides drinking water, the Department is collecting the necessary sampling information and is taking actions to ensure compliance within the required 5-year timeframe.

## Has Holloman tested its water for PFAS?

Yes. In June and September of 2023, samples were collected from the point of entry into the distribution system (building 58).

**Not Detected**

We are informing you that drinking water testing results were not detected for all 6 PFAS compounds covered by the EPA drinking water rule, including PFOA and PFOS. The water system will be periodically resampled as required by the EPA PFAS drinking water rule to ensure continued compliance.

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## Additional Monitoring

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

Our recent water quality testing under EPA's Unregulated Contaminant Monitoring Rule 5 (UCMR5) has shown that all detected contaminants are at levels well below any health-based guidelines, ensuring the continued safety of our community's drinking water. We tested for a broad range of substances, including chemicals and metals, and are pleased to report that sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications.

Name	Reported Level	Range	
		Low	High
HAA6Br (ug/L)	1.06	0	3.35
HAA9 (ug/L)	1.43	0	4.6
Lithium (ug/L)	16.6	15.2	16.6
manganese (ug/L)	0.43	0.41	0.43

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## Terms and Definitions

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

Unit Descriptions	
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
mrem/yr	mrem/yr: millirems per year (a measure of radiation absorbed by the body)
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

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