

2023 Consumer Confidence Report for Cannon AFB



Is my water safe?

Cannon AFB drinking water is sampled by the office of Bioenvironmental Engineering to meet state compliance which is derived from Environmental Protection Agency's (EPA) Standards. Based on all sampling performed in 2023, water distributed to Cannon AFB is safe to drink for the general populous. This year's Annual Water Quality Report (Consumer Confidence Report), which is required by the Safe Drinking Water Act (SDWA), 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.

Customers can call the Safe Water Drinking Hotline (800-426-4791) for the latest EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants.



Where does my water come from?

Cannon AFB uses groundwater as the source for all potable water supplied to the base and Chavez housing areas. Water is extracted from the Ogallala Aquifer using six wells located on the base property. This water is disinfected with chlorine and delivered to the consumer through a network of underground pipes known as a distribution system. Based on the size of our system and the number of customers, the base wells are registered with the New Mexico Environment Department (NMED) as Community Water Sources.



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 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
- 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.

Source water assessment and its availability

The Cannon Air Force Base Water System has approximately 7,832 year-round residents and is classified as a Community Water System, according to the New Mexico Drinking Water Regulations 20.7.10 NMAC. The water system consists of six wells, five storage tanks, one treatment plant, two booster stations and distribution lines. The wells are capable of producing a combined output of 1,200 gallons per minute (GPM). The storage tanks are constructed of steel with a combined capacity of 992,000 gallons. The treatment plants include disinfection with 12.5 % sodium hypochlorite. The distribution network consists of approximately 80% PVC, 10% iron and 10% asbestos concrete piping. Source water assessments are reports that generate information about potential contaminant sources and the potential for systems to be impacted by these sources. If customers would like more information regarding the source water assessment program (SWAPP) contact the Drinking Water Bureau at 505-476-8620 or toll free at 1-877-654-8720.



How can I get involved?

For water system questions, contact Civil Engineer Squadron Customer Service at 575-784-2001.

For water quality questions, contact Bioenvironmental Engineering Flight at 575-784-4063.

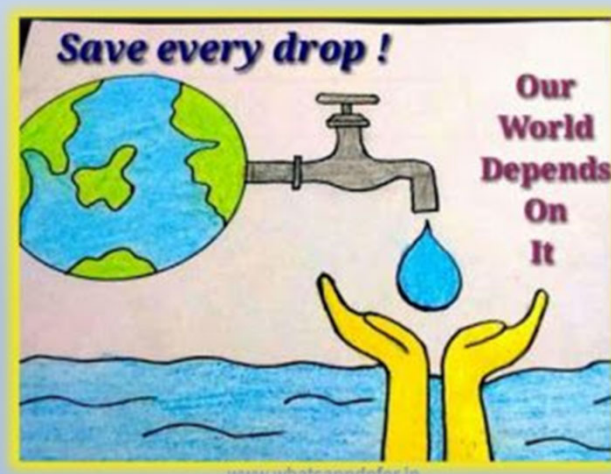
For Fluoride and dental health questions, contact the Dental Clinic at 575-904-4041.

CDC/ATSDR: CDC Info: <https://www.cdc.gov/cdc-info/>, or 800-232-4636 for PFAS information.

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.

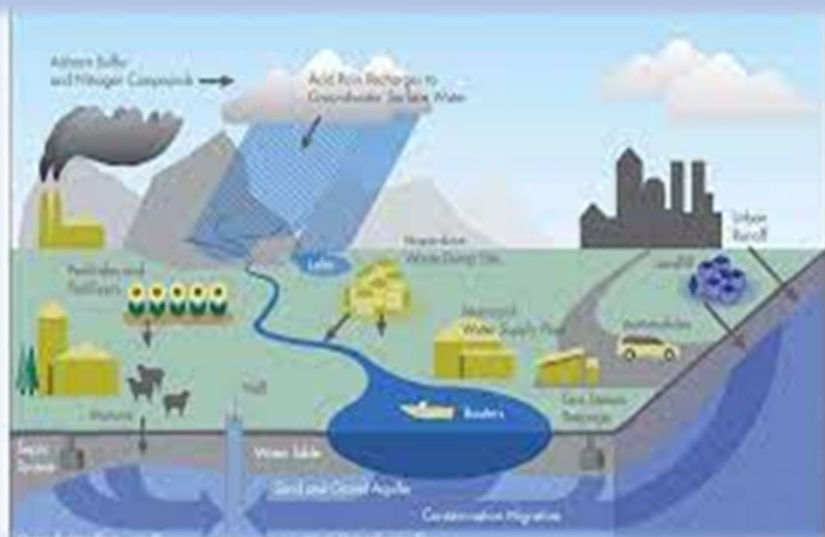
- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair, and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can 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.



Additional Information for Fluoride

While your drinking water meets EPA's maximum contaminant standard of 4 mg/L for fluoride (drinking water containing more than 4 milligrams per liter (mg/L) of fluoride can increase your risk of developing bone disease), it does not meet the secondary limit of 2 mg/L. At low levels, fluoride can help prevent cavities, however it is important to be aware that drinking water containing more than 2 mg/L of fluoride may develop cosmetic discoloration of children's (under the age of nine) permanent teeth called dental fluorosis.

Children under nine should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of permanent teeth. This problem occurs only in developing teeth before they erupt from the gums. You may also want to contact your dentist about proper use of fluoride-containing products by young children. Older children and adults may safely drink the water.

The AF is required to notify you when the fluoride levels in your drinking water exceed 2 mg/L because of the above-described cosmetic dental problems.. Cannon AFB drinking water does not contain more than 4 mg/L of fluoride. Cannon AFB continues to monitor fluoride levels and will inform you if the fluoride concentration exceeds 4 mg/L.

Fluoride contamination is rarely due to human activity. It occurs naturally in some areas and is found in high concentrations in our source water. Some home water treatment units can remove fluoride from drinking water. To learn more about available home water treatment units, contact the National Science Foundation (NSF) International at 1-720-227-0640. Additionally, Cannon AFB provides no-cost low-fluoride water (0.7 to 1.2 mg/L) at 4 locations and at the CDCs. The self-service locations are as follows:

- The Water Plant (Bldg. 336)
- Doc Stewart Community Center/Currently down for repairs (Bldg. 9982)
- Airman's Attic/Library (Bldg. 76)
- The Shoppette on the SE side of base (Bldg. 4623)

To reduce fluoride intake, use water from these locations to drink and where water is integral to food preparation.



Additional Information for Lead

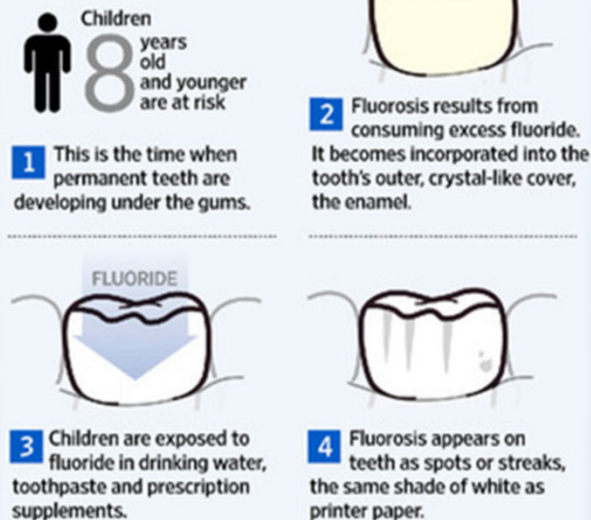
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Cannon AFB WS is responsible for providing high quality drinking 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>.

Additional Information for 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.

How Fluorosis Works



Source: Centers for Disease Control and Prevention



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 the drinking water contaminants that we detected during the calendar year (2023) 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 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 on page 6.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detected In Your Water	Range		Sample Date	Violat ion	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as Cl ₂) (ppm)	4	4	0.7	0.4	0.7	2023	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	N/A	60	2.4	2.4	2.4	2023	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	N/A	80	6	5.91	6	2023	No	By-product of drinking water disinfection
Inorganic Contaminant								
Arsenic (ppb)	0	10	1.6	1	1.6	2023	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.036	0.031	0.036	2023	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	2	2	2	2021	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	3.4	2.8	3.4	2023	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	14	13	14	2023	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (optional) (ppm)	N/A	N/A	65	63	65	2023	No	Erosion of natural deposits; Leaching
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	2	1	2	2023	No	Erosion of natural deposits
Uranium (ug/L)	0	30	6.9	6.1	6.9	2023	No	Erosion of natural deposits

Water Quality Data Table Cont.

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.11	2023	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	0.06	2023	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Additional Monitoring

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals during the Fifth Unregulated Contaminant Monitoring Rule (UCMR 5). 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. Currently, Cannon AFB is sampling for Per- and Polyfluoroalkyl (PFAS) substances as part of an EPA sampling project.

EPA issued interim Health Advisories for PFOS and PFOA in 2022. EPA announced a proposed regulation on PFAS drinking water standards for public comment on March 14, 2023. The Department of Defense (DoD) supports EPA taking regulatory actions to address PFAS, including a drinking water standard for PFAS that will apply to all drinking water suppliers once final. DoD respects and values the public comment process on this proposed nationwide drinking water rule and looks forward to implementing the clarified regulatory drinking water standard for PFAS released in 2024. This report is only for data that applies to the 2022 EPA Interim Health Advisory (Health advisories are non-regulatory and reflect EPA’s assessment of the best available peer-reviewed science).

- Prior to the release of the EPA drinking water regulation and to account for emerging science that shows potential health effects of:
- PFOS at levels lower than 0.00002 ppb
 - PFOA at levels lower than 0.000004 ppb
 - GenX at levels lower than 0.01 ppb
 - PFBS at levels lower than 2 ppb

DoD has been evaluating its efforts to address PFAS in drinking water, and what actions we can take to be prepared to incorporate this standard, such as reviewing our current data and collecting additional sampling where necessary. DoD remains committed to communicating and engaging with our communities throughout this process. **PFOS, GenX, and PFOA were not detected in our water during the UCMR 5 sampling event.**

Name	State MCL	Health Advisory Level	Reported Level	Range	
				Low	High
perfluorobutanesulfonic acid (PFBS) (ppb)	N/A	2000	0.015	0.0042	0.015
perfluoroheptanoic acid (PFHpA) (ppb)	N/A	N/A	0.006	0	0.006
perfluorohexanesulfonic acid (PFHxS) (ppb)	N/A	N/A	0.013	0.0032	0.013
Lithium (ppb)	N/A	N/A	111	73.6	111
Perfluorobutanoic acid (PFBA) (ppb)	N/A	N/A	0.012	0.005	0.02
Perfluorohexanoic acid (PFHxA) (ppb)	N/A	N/A	0.0221	0.0043	0.028
Perfluoropentane sulfonic acid (PFPeS) (ppb)	N/A	N/A	0.0061	0.0057	0.0061
perfluoropentanoic acid (PFPeA) (ppb)	N/A	N/A	0.042	0.0089	0.042

Important Terms

Term	Definition
Unit Description	
µg/L	µg/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)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
N/A	N/A: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required but recommended.
Drinking Water Terms	
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	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	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
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	State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
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	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	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level
SOC	Synthetic Organic Compounds

Monitoring and reporting of compliance data violations

- On 7/12/2023 we received a violation for failing to collect asbestos during the 2020-2022 compliance period. We have not returned to compliance regarding this violation. We will correct this by resampling on June 24th, 2024.
- On 7/12/2023 we received a violation for failing to collect a nitrate sample in 2022. We have returned to compliance regarding this Notice of Violation (NOV).
- On 7/12/2023 we received a violation for failing to collect an SOC sample in 2022. We have not returned to compliance regarding this violation. We will correct this by resampling on July 1st, 2024.

Please see attachment for the full New Mexico Environmental Department (NMED) NOV

Contact Name: SrA Daniel Migliore
 Address: 224 West D.L. Ingram Ave, Cannon AFB, NM 88103
 Phone: 575-904-3868

MILES L. CHEN, Maj, USAF
 Flight Commander, Bioenvironmental Engineering

Attachment:
 Notice of Violation – **Inorganics Monitoring and Reporting**



Notification provided via E-mail

July 12, 2023

SrA Daniel Migliore, daniel.t.migliore2.mil@health.mil
Cannon Air Force Base Water System, NM3567905
224 West D.L. Ingram Ave, Bldg 1408
Cannon, NM 88103

RE: Notice of Violation – Inorganics Monitoring and Reporting

Dear SrA Daniel Migliore:

This letter serves as Notice of Violation that the Cannon Air Force Base Water System did not complete the monitoring requirements for the inorganic contaminants listed in Table 1. The monitoring requirements for inorganic contaminants are defined in the New Mexico Drinking Water Regulations, 20.7.10.100 NMAC [incorporating 40 CFR Section 141.23, Inorganic chemical sampling and analytical requirements].

Table 1

Contaminant	Facility	Compliance Period
Asbestos	Distribution	2020-2022
Nitrate-Nitrite	Entry Point #1	2022
Nitrate-Nitrite	Entry Point #2	2022
Nitrate-Nitrite	Entry Point #4	2022

This letter also serves as Notice of Violation that the Cannon Air Force Base Water System did not complete the monitoring requirements for the organic contaminants listed in Table 2. The monitoring requirements for organic contaminants are defined in the New Mexico Drinking Water Regulations, 20.7.10.100 NMAC [incorporating 40 CFR Section 141.24(f)].

Table 2

Contaminant	Facility	Compliance Period
Regulated SOC	Entry Point #1	2020-2022
Regulated SOC	Entry Point #2	2020-2022
Regulated SOC	Entry Point #4	2020-2022

The New Mexico Environment Department Drinking Water Bureau (DWB) requires the Cannon Air Force Base Water System to notify customers of the monitoring violations shown in Table 1 and Table 2 as required in 20.7.10.100 NMAC [incorporating 40 CFR Section 141.204]. The notice must be provided to all customers and others who drink the water no later than one year from the date on this Notice of Violation by mail or direct delivery and the Cannon Air Force Base Water System must repeat the notice annually for as long as the violation persists. In addition, public notice must be provided by one other method reasonably expected to reach consumers of the water system, i.e., publication in a local

newspaper or posting in conspicuous locations. This notice must remain posted as long as the violation persists.

Pursuant to 20.7.10.100 NMAC [incorporating 40 CFR Section 141.31(d)] the Cannon Air Force Base Water System must certify that the notice was published and the method of publication, by submitting a completed copy of the enclosed Public Notification Certification Form to the DWB within 10 days of completing the public notification requirements. A representative copy of each type of notice distributed, published, posted or made available to the people served by the system must be included with the certification form.

Please fill out and return the enclosed Public Notice Certification Form to:
Brandi Littleton by email to brandi.littleton@env.nm.gov

Failure to comply with the public notice requirements will result in an additional violation (failure to notify the public and the state) being issued without notice to the Cannon Air Force Base Water System. Continued failure to comply with Public Notification Requirements, as defined in 20.7.10.100 NMAC [incorporating 40 CFR Sections 141.204 and 141.31(d)] will result in escalated enforcement actions including issuance of Administrative Orders with possible penalties assessed against the Cannon Air Force Base Water System.

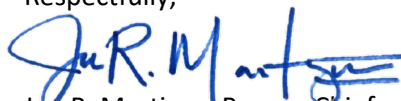
NMED-DWB reserves the right to take additional enforcement action regarding the violations identified in this NOV, to include the issuance of an Administrative Compliance Order compelling compliance and issuing civil penalties.

Pursuant to the NMED Delegation Order dated March 24, 2023, the Cabinet Secretary has delegated the authority to issue Notice of Violations to DWB Bureau Chief Joe R. Martinez.

Please note that your facility will appear on the Department's Enforcement Watch as a result of this NOV (see: <https://www.env.nm.gov/enforcement-watch/>). Further, the Department will issue a press release to local media highlighting your public water system as appearing on this webpage. Your public water system will remain on the Enforcement Watch website as an active matter until this matter is fully resolved.

If you have any questions or need assistance, please contact Brandi Littleton at 575-323-4298 or by e-mail at brandi.littleton@env.nm.gov

Respectfully,

A handwritten signature in blue ink, appearing to read "Joe R. Martinez", is written over a horizontal line.

Joe R. Martinez, Bureau Chief
Drinking Water Bureau
Water Protection Division

Enclosures: Public Notice Template
 Public Notice Certification Form

xc: Brandi Littleton, Southern Compliance Supervisor (electronic)
 Electronic Central File

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring and Reporting Requirements Not Met for Cannon Air Force Base Water System

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

On July 12, 2023 we became aware that our system recently failed to collect the correct number of drinking water samples. Although this incident was not an emergency, as our customers, you have a right to know what happened, and what we are doing to correct the situation.

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. Table 1 lists the contaminants and the compliance periods which we did not monitor or test and therefore cannot be sure of the quality of our drinking water during the compliance periods.

Table 1

Contaminant	Facility	Compliance Period
Asbestos	Distribution	2020-2022
Nitrate-Nitrite	Entry Point #1	2022
Nitrate-Nitrite	Entry Point #2	2022
Nitrate-Nitrite	Entry Point #4	2022
Regulated SOC	Entry Point #1	2020-2022
Regulated SOC	Entry Point #2	2020-2022
Regulated SOC	Entry Point #4	2020-2022

What should you do?

There is nothing you need to do. You do not need to boil your water or take other corrective actions. You may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

What is being done?

Bioenvironmental will re sample on June 24, 2024 and July 1, 2024 to bring the water system back to compliance.

For more information, please contact:

SrA Daniel Migliore at 575-784-4063
Cannon Air Force Base Water System, NM3567905
224 West D.L. Ingram Ave, Bldg 1408
Cannon, NM 88103

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.