2024 Annual Consumer Confidence Report

F.E. Warren AFB
PWS I.D. No: WY5680122

What is a Consumer Confidence Report (CCR)?

F.E. Warren AFB Bioenvironmental Engineering (BEE) prepares this report each year in accordance with the Safe Drinking Water Act (www.epa.gov/sdwa). The CCR includes a summary of source water information, detected contaminants, compliance with Federal, State, and local regulations and standards. The Board of Public Utilities (BOPU) CCR is also attached with F.E. Warren's CCR to add information on where our water is sourced, how it is supplied, and to give information on additional sampling BOPU completed. The purpose of the CCR is to improve public health by providing information that assists consumers with making educated decisions regarding any potential health risks pertaining to the quality, treatment, and management of their drinking water. If you have questions, please contact 90th Missile Wing Bioenvironmental Engineering at (307) 773-3088 or 90th Missile Wing Water Quality Program Manager at (307) 773-4359.

Is my water safe?

Yes, our water meets all U.S. Environmental Protection Agency's (EPA) health standards in accordance with Title 40, Code of Federal Regulation (CFR) Parts 141 and 142. In 2024, numerous tests were conducted for contaminants that may be found in drinking water. The 2024 Annual Consumer Confidence Report (CCR) for F.E. Warren AFB is supplemented by the attached 2024 City of Cheyenne Board of Public Utilities (BOPU) CCR. As shown in the City of Cheyenne BOPU CCR, Section 13, there were no violations of any standards in 2024. Included are details about where your water comes from, what it contains, and how it compares to standards set by federal regulatory agencies.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. There are several groups of people at risk for infections. These people include Immunocompromised 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 people, and infants, can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. Guidelines from the EPA and Centers for Disease Control (CDC) identifying the appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Where does my water come from?

Your water comes from the Cheyenne BOPU water system and is a mixture of surface and ground water. We maintain the drinking water distribution system within the base boundaries but do not treat the water in any way. We have limited monitoring requirements to supplement the complete range of sampling already performed by the City of Cheyenne BOPU. The 2024 City of Cheyenne BOPU CCR is included with our report and provides information about the City of Cheyenne's monitoring, additional definitions and required educational information, and the source of our water.

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 industries 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, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) used for fighting petroleum fires at airfields and in industrial fire suppression processes because they rapidly extinguish fires, saving lives and protecting property. PFAS chemicals are persistent in the environment, and some are persistent in the human body – meaning they do not break down and they can accumulate over time.

Is there a regulation for PFAS in drinking water?

On April 10, 2024, EPA announced the final National Primary Drinking Water Regulation (NPDWR) for six PFAS. As the lead federal agency responsible for protecting America's drinking water, EPA is using the best available science on PFAS to set national standards. PFAS can often be found together in water and in varying combinations as mixtures. Decades of research shows mixtures of different chemicals can have additive health effects, even if the individual chemicals are each present at lower levels. This new rule will significantly reduce the level of PFAS in drinking water across the United States. Many states have worked to monitor for and reduce PFAS exposure in drinking water through state-specific regulations. This rule builds on these efforts by incorporating the latest science and establishing a nationwide, long-term

health protective level for these specific PFAS in drinking water. Communities and states will need to determine whether PFAS is in their drinking water and take actions such as notifying consumers and reducing the levels of PFAS, as needed.

Has F. E. Warren AFB tested its water for PFAS?

Yes. In March, June, September and December of 2024, representative samples of F.E. Warren's water were collected and tested. We are pleased to report that drinking water testing results were below the Method Reporting Limit (MRL) for all 30 PFAS compounds covered by the sampling method, including PFOA and PFOS. This means that PFAS were not detected in your water system. In accordance with DoD policy, the water system will be resampled every three years for your continued protection.

Has F. E. Warren AFB tested its water for Unregulated Contaminates?

Yes. Our water system has been sampled for a series of unregulated contaminants in March, June, September and December of 2024. All unregulated contaminates sampled throughout this time were non detectable within our drinking water system. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact the BEE Office at (307)-773-3088 or email usaf.fewarren.90mdg.mbx.90mdgbio@health.mil.

Abbreviations and Terms Used in This Report

AL	Action Level
RL	Report Limit
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MDL	Method Detection Limit
mg/L	Number of milligrams of substance in one liter of water
µg/L	Number of micrograms of substance in one liter of water
ppm	Parts per million, or milligrams per liter (mg/L): One part per million corresponds to one minute in 2 years or one penny in $10,000.
ppb	Parts per billion, or micrograms per liter (µg/L): One part per billion corresponds to one minute every 2,000 years or 1 penny in $10,000,000.
ND	None detected
LRAA	Locational Running Annual Average
TTHM	Total Trihalomethanes
HAA5	Haloacetic Acids
TOC	Total Organic Carbon
PFAS	Per- and Polyfluoroalkyl
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctanesulfonic Acid

Important Drinking Water Definitions

Report Limit (RL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements, which a water system must implement. An action level is different from a Maximum Contaminant Level (MCL), in that while an MCL is a legal limit of contaminant, an action level is a trigger for additional prevention or removal steps.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards for public water-supply systems.

Maximum Contaminant Level Goal (MCLG): 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.

Method Detection Limit (MDL): The lowest level at which the laboratory can detect a contaminant using the prescribed method per the EPA.

Water Quality Data

F.E. Warren AFB does not duplicate sampling conducted by BOPU. Table 1: *Per- and polyfluoroalkyl substances (PFAS)*, Table 2: *Microbial*, Table 3: *Disinfectant Byproducts (DPB),* and Table 4: *Lead and Copper* below list all the drinking water

contaminants that were collected and/or detected during the calendar year. Regulatory contaminant sampling frequency is based on the likelihood of changes in concentration; therefore, not all contaminants are sampled for each year.

TABLE 1: Per- and polyfluoroalkyl substances (PFAS)

Contaminants	Violation Yes/No	Levels Detected (mg/L)	MCLG	MCL	Sample Dates	Typical Sources/Comments
PFOS	No	ND	0 ug/L	4 ng/L	Mar, Jun, Sep & Dec 2024	Industrial Sites such as metal fabrication and paper manufacturing and even firefighting foam.
PFOA	No	ND	0 ug/L	4 ng/L	Mar, Jun, Sep & Dec 2024	Industrial Sites such as metal fabrication and paper manufacturing and even firefighting foam.

TABLE 2: Microbial

Contaminants	Violation Yes/No	Levels Detected (mg/L)	MCLG	MCL	Sample Dates	Typical Sources/Comments
Chlorine (mg/L)	No	Min: 0.01 Max: 1.15 Avg: 0.42	4.0	4.0	Jan –Dec 2024	Water additive to control microbes.
Total Coliform Bacteria	No	Presence/Absence Testing ND	NA	NA	Jan – Dec 2024	Naturally present in the Environment

TABLE 3: Disinfection Byproducts (DPB)

Contaminants	Violation Yes/No	Levels Detected (mg/L)	MCLG	MCL	Sample Dates	Typical Sources/Comments
TTHM (µg/L) **Total Trihalomethanes** (Sum of the 4 compounds: Chloroform, Bromoform, Bromodichloromethane, Dibromochloromethane)	No	Bldg. 1152 Min: 30.79 Max: 46 Avg: 35.85 Bldg. 665 Min: 28.4 Max: 44.6 Avg: 34.03	0	80	Jan – Dec 2024	By-product of drinking water chlorination.
HAA5 (µg/L) **Haloacetic Acids** (Sum of the 5 compounds: Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, Dibromoacetic Acid)	No	Bldg. 1152 Min: 15.5 Max: 26 Avg: 19.95 Bldg. 665 Min: 1.4 Max: 21.4 Avg: 9.75	0	60	Jan – Dec 2024	By-product of drinking water chlorination.

TABLE 4: Lead and Copper

Contaminants	Violation Yes/No	Levels Detected (mg/L)	MCLG	MCL	Sample Dates	Typical Sources/Comments
Lead	No	90 percent of results were less than 0.011. Results ranged from ND to 0.011.	0	0	Jul 2024	Corrosion of household plumbing systems This sample was taken from a private residence.
Copper	No	No analysis results exceeded the MCL. Results ranged from 0.06 to 1.13.	1.3	1.3	Jul 2024	Corrosion of household plumbing systems This sample was taken from a private residence.

Frequently Asked Questions

What is a Boil Water Notice?
Any time a drop in pressure occurs from a water main break or system maintenance, the Bioenvironmental Engineering Flight issues a Boil Water Notice and immediate sampling requirements go into effect. Boil Water Notices in these cases are precautionary and do NOT necessarily mean that contamination has been detected or is suspected. In other cases, if coliform is detected as part of our routine sampling program, a Boil Water notice will also go into effect as a precaution while corrective measures are taken. In this case, resampling continues until the corrective measures are completed.

I don't like the taste/smell/appearance of my tap water. What's wrong with it?
Even when water meets standards, you may still object to its taste, smell, or appearance. Taste, smell and appearance are also known as aesthetic characteristics and do not pose adverse health effects. Common complaints about water aesthetics include: temporary cloudiness (typically caused by air bubbles) or chlorine taste (which can be improved by letting the water stand exposed to the air).

Will using a home water filter make the water safer or healthier?
Most filters improve the taste, smell and appearance of water, but they do not necessarily make the water safer or healthier. If you use filters, please keep in mind that they require regular maintenance and replacement. Failure to perform maintenance and replacement can result in unsafe water.

What can I do to improve the quality of my drinking water?
Running the cold water tap for 30 seconds prior to use helps to flush out small amounts of metals that may leach into water that has been sitting in metal pipes overnight. Water used for consumption should always come from the cold-water tap. Hot water has a higher potential to leach metals into the water