



# Bi-annual Consumer Confidence Report (CCR)

## CY 2024—June 2025 Water Quality Report

### Marine Corps Installations Pacific

#### Marine Corps Base Camp S.D. Butler, Camp Foster

#### Okinawa, Japan



#### Introduction

This is a biannual report on the quality of drinking water delivered to Marine Corps Base (MCB) Camp S.D. Butler, Camp Foster. The purpose of this report is to provide you, our customers, with general information about the quality of water you drink. Biannual reports are required for camps with a population size greater than 10,000 people.

#### What is a Consumer Confidence Report?

In 1996, Congress amended the Safe Drinking Water Act (SDWA) to require all community water systems in the United States to provide their customers with a brief annual water quality report called a Consumer Confidence Report (CCR). Last year (2024) through June 2025, over 50 different drinking water contaminants were evaluated for compliance. Only contaminants measured in concentrations above their respective analytical methods' detection limits are reported in this CCR.

#### Safe Drinking Water

Drinking water regulations require that all installation water supply systems are sampled and analyzed for a variety of contaminants in drinking water. Calendar year 2024 through June 2025, your drinking water met health-based water quality standards regulated by the Japan Environmental Governing Standards (JEGS). The primary purpose of the JEGS is to provide environmental compliance criteria and management practices to be used by United States Department of Defense installations in Japan. MCB Camp Butler, G-F, Environmental Affairs Branch (EAB) and Air Force 18th Medical Group, Bioenvironmental (BE) personnel are committed to providing safe drinking water to you and your family. Our routine monitoring program, which follows water quality standards and monitoring requirements set forth in the JEGS, enables us to maintain optimal water quality on Camp Foster.

#### Information about Drinking Water Contaminants

All drinking water, including bottled water, may contain small amounts of contaminants dissolved in the water. The presence of trace contaminants in the water does not necessarily indicate that the water poses a health risk. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, naturally-occurring radioactive material, and can pick up substances resulting from the presence of animals or human activity. Microbial contaminants, such as viruses and bacteria, may come from municipal wastewater treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, 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 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, are by-products of industrial processes and petroleum production. They may also enter the environment from gas stations, urban stormwater runoff, and septic systems. Radioactive contaminants 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, the JEGS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

#### Do I Need to Take Special Precautions?

Our monitoring program identifies contaminants in drinking water and allows us to avoid potential health impacts if we consume water containing contaminants over long periods of time above the standards set forth in the JEGS. However, some individuals may be more vulnerable to contaminants than the general population. For example, immunocompromised individuals such as persons with cancer undergoing chemotherapy, organ transplant recipients, persons with HIV/AIDS or other immune system disorders, the elderly, and infants can be particularly at risk from contaminants. These individuals or their caretakers should seek medical advice about drinking water from their health care providers if they have questions.

#### Camp Foster Water System Information

The Camp Foster drinking water system is jointly operated and maintained by G-F Facilities Maintenance Branch and 18th Civil Engineer Squadron. The drinking water is purchased from the neighboring municipalities Kitanakagusuku-son and Chatan-cho and the drinking water is produced at the Chatan Water Treatment Plant (WTP). The water supply to the treatment plant is a combination of surface waters (reservoirs and rivers), groundwater wells, and a desalination plant fed by the East China Sea. Chatan WTP utilizes both biological and conventional water treatment processes and ozone as its disinfectant. In addition, chlorine residual is maintained in the distribution system for additional protection as water travels to the tap.

#### Monitoring of Your Drinking Water

G-F EAB is responsible for drinking water monitoring of Marine Corps-owned infrastructure including all non-housing areas on Camp Foster. BE is responsible for maintaining the water quality of Air Force-managed military family housing on Camp Foster. Together, G-F EAB and BE are committed to providing safe drinking water to you. We use only United States (U.S.) Environmental Protection Agency (EPA) and GOJ approved laboratory methods to analyze your drinking water. Trained personnel collect water samples from the distribution system and residential taps. Samples are then shipped to an accredited laboratory where a full spectrum of water quality analyses are performed. BE and contracted personnel collected all required routine monitoring samples in calendar year 2024 through June 2025, none of which were at a level higher than the JEGS Maximum Contaminant Level (MCL).

# Frequently Asked Questions

## Why does the water sometimes look rusty?

Rusty or reddish tinted water may occur because of a sudden change in pressure due to fire hydrant flushing, water main breaks, or other disturbances that result in a change to normal water flow. Iron causes the discoloration and is not a health risk. The normal flow of water will usually clear the mains within two hours or less. Check your water by flushing a commode bowl three times every 15 to 20 minutes. If you live on or near the end of a long distribution line, additional flushing may be required. Galvanized iron pipes or fittings within a home or building may also cause discolored water. Running the water will clear the piping system. If the hot water is rusty, the water heater may need to be flushed.

## What is a Boil Water Notice?

Any time a drop in pressure occurs from a water main break or system maintenance, G-F EAB will issue 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 total coliform bacteria are 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.

## Is it okay to drink from a garden hose?

The water that supplies the water hose is safe but a garden hose may be treated with chemicals and can contain bacteria and other substances. Drinking from a garden hose is highly discouraged.

## Will using a home water filter make the water safer or healthier?

Most filters improve the taste, smell and appearance of water, but they may not necessarily make the water safer or healthier. If you use filters, please keep in mind that they require regular maintenance and replacement or the filter itself can impact water quality.

## 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 more potential to leach metals into the water.

## How will I know if my water is not safe to drink?

Your water supplier must notify you if your water does not meet standards or if there is a waterborne disease emergency. The notice will describe any precautions you need to take, such as boiling your water.

## 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).

## Does the water system have a lead problem?

The JEGS state that 90% of samples must be below the action level, and the water system met that criterion in 2024. 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. 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 the water for drinking or cooking.

## 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 are found in many consumer products, as well as in industrial products, like certain firefighting agents called aqueous film forming foam (AFFF). PFAS are also found in essential use applications such as in microelectronics, batteries, and medical equipment. 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, the EPA announced a final rule on drinking water standards for certain PFAS under the Safe Drinking Water Act (SDWA). These standards were promulgated for overseas installations on September 28, 2025 through the DoD policy memo titled *Policy for Monitoring and Treatment of Per- and Polyfluoroalkyl Substances in Department of Defense Drinking Water Systems outside the United States*. The standards within this memo apply to all DoD-operated water systems and all drinking water purchased from Host Nation treatment plants. The standards set maximum contaminant levels (MCL) for several PFAS in drinking water, mandate initial monitoring to be completed by April 26, 2027, establish routine monitoring and notification requirements, and require compliance for all regulated drinking water purveyors to comply with the specified MCLs by April 26, 2029. We are working to protect the drinking water on our installation and ensure compliance with standards in advance of the deadline. The DoD policy memo establishes the following MCLs listed in Table 1 as a running annual average (RAA):

**Table 1: New PFAS MCLs**

Chemical	MCL (ppt)
Perfluorooctanoic acid (PFOA)	4.0
Perfluorooctane sulfonic acid (PFOS)	4.0
Perfluorononanoic acid (PFNA)	10
Perfluorohexane sulfonic acid (PFHxS)	10
Hexafluoropropylene oxide dimer acid (HFPO-DA or GenX)	10
Mixture of two or more: PFNA, PFHxS, HFPO-DA, PFBS	Hazard index of 1

Protecting the health of our personnel, their families, and the communities in which we serve is a priority for the Department. DoD is committed to complying with requirements of the DoD policy and the continued provision of safe drinking water to those that work and live on DoD installations.

## Has Camp Foster tested its water for PFAS in 2024 through June 2025?

Yes. Quarterly samples were collected from the entry point to Camp Foster. Six of the 29 PFAS analytes covered by the sampling methods were detected above the method reporting limits (MRLs) in your water system. The results are provided in the Water Quality table. The detected levels for PFOA, PFOS and PFHxS are below the new MCLs. There are no MCLs for the remaining three detected PFAS.

## What is next?

Camp Foster's initial monitoring for PFAS in accordance with DoD policy is complete. Based on these results, the installation will continue quarterly monitoring for PFAS in CY 2025.

## Is a Japanese translation of the CCR available?

All sections of the CCR are written in English. Please contact the G-F EAB for a Japanese translation.

CCRの全てが英文の文書です。日本語訳希望者は施設技術部環境保全課までご連絡下さい。

基地内：645-1425

基地外から：098-970-1425

## Where can I go for additional information?

This CCR will be posted on the MCIPAC web page at <https://www.mcipac.marines.mil/Resources/Environmental-Notices/>.

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### G-F Environmental Affairs Branch Drinking Water Program

DSN: 645-1425

Comm: 098-970-1425

基地内：645-1425

基地外から：098-970-1425

mcbb.gf.envwater@usmc.mil



### 18 OMRS/SGXB

#### Bioenvironmental

DSN: 634-4752

Comm: 098-938-1111 ext. 634-4752

基地内：634-4752

基地外から：098-938-1111 ext. 634-4752



# Abbreviations and Definitions

**AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.

**CY (Calendar Year):** Period of time from January through December. Data reported in the consumer confidence report were for samples collected in the reported calendar year unless otherwise stated.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant allowed in drinking water.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water.

**µg/L (Microgram per liter):** Unit of concentration often used to express the concentration of a contaminant in drinking water. Microgram is one millionth of a gram.

**mg/L (Milligram per liter):** Unit of concentration often used to express the concentration of a contaminant in drinking water. Milligram is one thousandth of a gram.

**ND (Non-detect):** Concentration of contaminant below the detection limit or reporting limit of analytical method.

**ng/L (Nanogram per liter):** Unit of concentration often used to express the concentration of a contaminant in drinking water. Nanogram is one billionth of a gram.

**N/A (Not Applicable):** Not applicable for this contaminant.

**PFAS (per- and polyfluoroalkyl substances):** A group of manufactured chemicals that have been used in industry and consumer products since the 1940s.

**PFAS AL (PFAS Action Level):** Per Department of Defense policy issued on 11 July 2023, when the concentration of PFOA, PFOS, or the sum of PFOS and PFOA exceeds 70 parts per trillion (ppt), DoD components will provide alternative drinking water and take actions to lower PFOS and/or PFOA concentrations to below 70 ppt.

**PFOA (Perfluorooctanoic acid):** A chemical subset of PFAS.

**PFOS (Perfluorooctanesulfonic acid):** A chemical subset of PFAS.

**ppt (parts per trillion):** Unit of concentration often used to express the concentration of a contaminant in drinking water. Also expressed as nanograms per liter (ng/L).

**RAA (Running Annual Average):** Average of all the samples collected calculated within a 12 month period.

# CY 2024 - June 2025 Water Quality Table

Camp Foster									
Inorganic Chemicals	Violation? Yes/No	Units	Highest Level Detected		MCL	AL	Likely Source of Contamination		
Barium	No	mg/L	0.0084		2.0	N/A	Erosion of natural deposits		
Chromium	No	mg/L	0.001		0.02				
Selenium	No	mg/L	0.004		0.05				
Sodium	No	mg/L	16		N/A <sup>1</sup>				
Nitrate (as N)	No	mg/L	0.7		10				
Total Nitrate/Nitrite (as N)	No	mg/L	0.7		10				
<b>Microbial Contaminants</b>		Violation? Yes/No	Units	Number of Positive Samples		MCL <sup>2</sup>	AL	Likely Source of Contamination	
Total Coliform Bacteria		No <sup>3</sup>	N/A	2		>1 positive sample per month, or any repeat sample is positive	N/A	Naturally present in the environment	
Synthetic Organic Compounds		Violation? Yes/No	Units	Highest Level Detected		MCL	AL	Likely Source of Contamination	
Various		No	µg/L	ND		Various	N/A	Manmade compounds	
Volatile Organic Compounds		Violation? Yes/No	Units	Highest Level Detected		MCL	AL	Likely Source of Contamination	
Various		No	µg/L	ND		Various	N/A	Manmade compounds	
Disinfectant/Disinfection Byproducts		Violation? Yes/No	Units	Highest RAA	Range	MRDL <sup>4</sup> /MCL <sup>5</sup>		AL	Likely Source of Contamination
Free Chlorine		No	mg/L	0.34	0.01 – 1.20	4.0		N/A	Drinking water disinfectant for treatment
Total Trihalomethanes		No	µg/L	51	19 – 60	80		N/A	By-products of drinking water chlorination
Haloacetic Acids		No	µg/L	8.8	2.5 – 13	60			
Lead and Copper		Violation? Yes/No	Units	90 <sup>th</sup> Percentile Value		Sites Exceeding AL / No. of Sites		AL <sup>6</sup>	Likely Source of Contamination
Lead		No	mg/L	0.0040		0 / 35		0.015	Corrosion from household plumbing systems
Copper		No	mg/L	0.22		0 / 35		1.3	
Radionuclides		Violation? Yes/No	Units	Highest Level Detected		MCL	AL	Likely Source of Contamination	
Gross Alpha		No	pCi/L	1.49 ± 0.558		15	N/A	Erosion of natural deposits	
PFAS		Violation? Yes/No	Units	Highest RAA	Range	MCL <sup>7</sup>		PFAS AL <sup>7</sup>	Likely Source of Contamination
PFOA		No	ng/L	0	ND – 2.3	N/A		70	Runoff from industrial processes and fire-retarding foams
PFOS		No	ng/L	0	ND – 2.1			70	
PFOS + PFOA		No	ng/L	N/A <sup>8</sup>	0 – 4.4			70	
HFPO-DA		No	ng/L	0	ND				
PFHxS		No	ng/L	0	ND – 2.2				
PFNA		No	ng/L	0	ND				
PFBS		No	ng/L	0	ND				
Hazard Index		No	-	N/A <sup>9</sup>	N/A <sup>9</sup>				
PFBA		No	ng/L	N/A <sup>8</sup>	ND – 2.8				
PFHxA		No	ng/L	N/A <sup>8</sup>	ND – 2.5				
PFPeA		No	ng/L	N/A <sup>8</sup>	ND – 2.6				
Chatan Water Treatment Plant <sup>10</sup>									
Parameter	Violation? Yes/No	Units	Highest Level Detected		MCL	AL	Likely Source of Contamination		
Free Chlorine Residual	N/A	mg/L	1.0		N/A	N/A	Drinking water disinfectant for treatment		
Standard Plate Count Bacteria	N/A	#/mL	0		100	N/A	Naturally present in the environment		
Turbidity	N/A	degree	< 0.1		2	N/A	Soil runoff		

**Notes:**

1. No MCL established for Sodium. Monitoring is required so concentration levels can be made available upon request.
2. This is the total coliform-related operational evaluation level (OEL). The MCL for *E. coli* is exceeded when there is any combination of an *E. coli* positive sample result with a routine and repeat samples total coliform positive or *E. coli* positive sample result, or when a system fails to take repeat samples following positive samples. Some samples were not collected due to operational constraints, and corrective actions have been taken. All other routine samples were negative for total coliform, and the public water system continued to meet all water quality standards.
3. Routine and repeat samples were positive for total coliforms and negative for *E. coli* in June 2025 at Building 4707. Second, repeat sample was negative for total coliform and negative for *E. coli*. Therefore, this is not MCL violation, according to Japan Environmental Governing Standards.
4. The MRDL for Free Chlorine is based on a running annual average of monthly averages.
5. The MCLs for Total Trihalomethanes and Haloacetic Acids are based on locational running annual averages of quarterly samples.
6. The AL for Lead and Copper is based on a 90<sup>th</sup> percentile value – i.e., no exceedance in the AL in more than 10% of all sampled taps.
7. During the sampling period covered in this CCR, no MCLs had been formally established for overseas drinking water systems and the action level of 70 ppt was in effect. Subsequent CCRs will include reference to regulatory limits and will remove language around action levels, as established in the 28 Sept 2025 DoD Policy Memo. Overseas installations must comply with new PFAS MCLs by April 2029.
8. N/A used here to denote no calculation of running annual average due to lack of established MCL.
9. N/A is used here because none of the PFAS compounds used to calculate the Hazard Index were detected in sampling.
10. Water quality data regarding Chatan Water Treatment Plant obtained from the Okinawa Prefectural Enterprise Bureau website.