2025 Annual

Water Quality Report

Camp Stover Water System

This report meets federal and state requirements for Consumer Confidence Reports. This report is updated annually and reflects monitoring data collected from Jan 1 - Dec 31, 2024.

The Navy is pleased to provide you with this year's annual Water Quality Report for the Camp Stover Water System.

This report provides information about the water delivered to you during the 2024 calendar year. It describes where your water comes from, what it contains, and how it compares to standards for safe drinking water.

The Navy's goal is to provide you with safe and dependable drinking water.

Water Provider

The Naval Facilities Engineering Systems Command (NAVFAC) Hawaii operates the water system servicing your area. As the Navy water provider in the State of Hawaii (State), we primarily supply water to military installations and housing.

Drinking Water Standards

To protect public health, the Environmental Protection Agency (EPA) prescribes regulations which limit the number of certain contaminants in tap water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

In the latest compliance monitoring period, the Honolulu Board of Water Supply (BWS) and Navy conducted tests for over 70 contaminants that have the potential for being found in your drinking water. Tables **1-1**, **1-2**, **1-3**, **1-4**, and **1-5** show the concentrations of regulated contaminants found. In all cases, the levels measured were well within both EPA and State requirements for safe drinking water.

We are continually working to protect your drinking water from contaminants. The State Department of Health completed the Source Water Assessment in 2004 which identifies the susceptibility of your water supply to contamination. The source water assessment is available for review by contacting NAVFAC Hawaii Public Affairs at NFHI_PAO_DL@us.navy.mil.

Source of Water

Your drinking water comes from BWS ground water wells: Wahiawa Wells I and II. Groundwater is naturally filtered as it travels from the surface to the aquifer below ground. The water is pumped up from the aquifer and piped into the BWS drinking water distribution system. From there, it enters the Navy's Camp Stover drinking water system where it is disinfected and delivered to your homes.

Possible Source of Contaminants

Both tap water and bottled water come from 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. The water can also pick up and transport substances resulting from the presence of animals or from human activity. These substances are also called contaminants.

Possible Source of Contaminants in Bottled 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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by contacting the EPA by calling the Safe Drinking Water Hotline (800-426-4791) or visiting the website epa.gov/safewater.

Potential Contaminants

Contaminants are any physical, chemical, biological, or radiological substance or matter in water.

Contaminants that may be present in source water include:

Microbial contaminants – such as viruses and bacteria, which 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 storm water 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 storm water runoff, and residential uses.

Organic chemical contaminants – including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm-water runoff, and septic systems.

Radionuclide contaminants – which can be naturally-occurring or be the result of oil and gas production and mining activities.

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing.

Navy Water Requirements

In accordance with Navy policy, chlorine are added to your water supply after the water is pumped from the ground. The Navy's goal is to maintain a concentration of approximately 0.2 ppm for chlorine throughout the distribution system.

Drinking Water Service Line Material Inventory

On January 15, 2021, EPA enacted the Lead and Copper Rule Revision (LCRR), further strengthening efforts to reduce lead and copper levels in drinking water. As a part of these revisions, all water systems were required to develop an initial inventory of the drinking water service line materials, known as the "Baseline Inventory" by October 16, 2024.

The Navy has completed the baseline inventories for each of its water systems. You can access the inventory yourself for your water system by visiting the link below. For privacy reasons, the exact street addresses have been replaced with unique Site IDs. It's important to note that the Camp Stover Water System is entirely serviced by non-lead service lines.

The baseline inventory is accessible here:

https://cnrh.cnic.navy.mil/Operations-and-Management/Environmental/Water-Quality-Information/Drinking-Water-Service-Line-Materials-Inventory/

Concurrent to the baseline inventory compliance date, the EPA enacted the Lead and Copper Rule Improvements (LCRI) on October 9, 2024, further strengthening the LCRR protection by introducing additional safeguards and setting a more aggressive timeline for replacing the lead or galvanized lines.

As such, the Navy's water systems must provide the updated baseline inventory to include the connector material along with the service line material inventory by November 1, 2027. The inventory will also be updated periodically to reflect the Navy's progress to remove any lead or galvanized materials services lines and connectors that are encountered.

Drinking Water Service Line Material Replacement Plan

In accordance with 40 C.F.R. § 141.84(c), all water systems with one or more lead, galvanized requiring replacement, or lead status unknown service lines in their distribution system must create a service line replacement plan by no later than November 1, 2027.

Since the Camp Stover Water System's service lines are entirely serviced by non-lead service lines, when the Navy's Replacement Plan becomes available, it will not include the Camp Stover Water System. However, the online inventory will be updated regularly to reflect connector material.

Corrosion and Optimal Corrosion Control Treatment (OCCT)

Corrosion of pipes, plumbing fittings, and fixtures may cause lead and copper to enter drinking water. To assess corrosion of lead and copper, Camp Stover Water System conducts tap sampling for lead and copper at selected sites every 3 years. The Camp Stover Water System is considered to meet OCCT because its most recent tap sampling results from September 2024 show that the 90th percentile lead level was non-detect. This means that 90% of the highest lead levels detected were at or below the limit of detection. Please see Table **1-2** for the Lead and Copper 90% percentile levels.

Safeguard Against Lead

In accordance with Federal regulations, specifically 40 CFR, the following statements are required and provide information to safeguard against lead. The Camp Stover Water System is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes.

If you are concerned about lead in your water and wish to have your water tested, contact JBPHH Drinking Water Call Center at (808) 210-6968. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead."

Lead Sampling in Schools

Beginning November 1, 2027, all Community Water Systems, the same systems that provide these annual Water Quality Reports (WQR), will be required to conduct sampling for lead in drinking water at schools and childcare facilities. Facilities that are being served by this water system are encouraged to contact the Navy to ensure that their school or childcare facility will be included in the sampling effort.

However, the Navy has already adopted a policy to perform lead sampling at schools and childcare facilities owned by the Department of Defense (DoD).

Please visit this website for more information:

https://cnrh.cnic.navy.mil/Operations-and-Management/Environmental/Water-Quality-Information/Lead-in-Priority-Area-Sampling-Program/

Public Discussion Opportunities

While there are no regularly scheduled meetings for discussions regarding the Camp Stover Water System, the public may communicate concerns related to water quality by emailing the NAVFAC Hawaii Public Affairs Office listed below.

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 is also found in essential use applications such as 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 26, 2024, EPA published a National Primary Drinking Water Regulation (NPDWR) final rule on drinking water standards for six PFAS under the Safe Drinking Water Act (SDWA).

The rule establishes the following maximum contaminant levels (MCLs):

- Perfluorooctane sulfonic acid (PFOS) = 4 ppt
  Perfluorooctanoic acid (PFOA) = 4 ppt
- Hexafluoropropylene oxide dimer acid (HFPO-DA, commonly known as GenX) = 10 ppt
- Perfluorononanoic acid (PFNA) = 10 ppt
- Perfluorohexane sulfonic acid (PFHxS) = 10 ppt
- Hazard Index (HI) MCL for PFHxS, PFNA, perfluorobutane sulfonic acid (PFBS), and GenX = 1 (unitless).

Under the NPDWR, regulated public water systems (PWS) are required to complete initial monitoring by April 26, 2027. Beginning April 26, 2027, regulated PWSs will conduct ongoing compliance monitoring in accordance with the frequency dictated by the rule and as determined by the initial compliance monitoring results. Regulated PWSs must demonstrate compliance with the MCLs by April 26, 2029.

In order to provide safe drinking water to all DoD personnel, OSD policy extends this requirement to all DoD systems which provide drinking water for human consumption, regardless of the size of the drinking water system. In addition to the six regulated compounds, DoD-owned systems are required by DoD policy to monitor for all 25 compounds detected when using EPA Method 533.

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 NPDWR and the continued provision of safe drinking water to those that work and live on DoD installations.

Has Camp Stover Water System tested its water for PFAS in 2024?

According to DoD policy, the Camp Stover Water System was not required to test for PFAS in 2024. However, the BWS has tested PFAS contaminants, provided in Table **1-1b**.

What is next?

The Camp Stover Water System will start to monitor for PFAS in accordance with EPA regulation and DoD policy. Once required initial monitoring information is available, we will calculate the Running Annual Averages (RAA) for the regulated PFAS and will compare those numbers to the MCL and Hazard Index (HI) trigger levels. This will determine what our continuing monitoring requirements will be beginning in 2027, and if needed, we will plan operational or infrastructure changes to ensure our water complies with the PFAS MCLs and HI by April 2029 in accordance with the SDWA.

For questions, concerns or hard copies, please contact:

NAVFAC Hawaii Public Affairs Office (PAO)
Telephone: 808-471-7300
Email: NFHI_PAO_DL@us.navy.mil

For additional copies of this and other Navy water reports, visit:

https://cnrh.cnic.navy.mil/Operations-and-Management/Environmental/Water-Quality-Information/

https://pacific.navfac.navy.mil/Facilities-Engineering-Commands/NAVFAC-Hawaii/About-Us/Our-Services/Environmental/Water-Quality-Reports/

Please share this information with all other people who drink this water, especially those who may not have received this notice directly.

Official Address

Naval Facilities Engineering Systems Command, Hawaii
400 Marshall Road, JBPHH, HI 96860-3139

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Water Quality Data Table

The following tables list contaminants that were detected during the latest round of sampling required by EPA and State regulations. The water samples were collected from either the source water or distribution system and analyzed by the State, BWS and/or the Navy. The presence of contaminants does not necessarily indicate that the water poses a health risk. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. You may obtain more information about contaminants and potential health effects by calling the EPA's Safe Drinking Water Hotline 1-800-426-4791 or the State's Department of Health at 808-586-4258.

Contaminants in the BWS Source Water — **Table 1-1a**

Contaminants (units)	MCL (Allowed)	MCLG (Goal)	Highest Average	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation	# of Sites Exceeding the Action Level
Regulated Contaminants								
1,2,3-Trichloropropane (ppb)	0.6	0.00	0.065	nd – 0.130	2024	Formerly used as a soil fumigant in agriculture and as gasoline additive	No	0
Barium (ppm)	2.0	2.00	0.003	0.002 – 0.003	2023[2]	Erosion of natural deposits	No	0
Chromium (ppb)	100	100	0.60	nd – 1.20	2022[2]	Naturally occurring	No	0
Dibromochloropropane (ppt)	40.0	0.00	0.012	0.012 – 0.012	2024	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards	No	0
Fluoride (ppm)	4.00	4.00	0.092	0.084 – 0.092	2024	Erosion of natural deposits; Water additive which promotes strong teeth	No	0
Nitrate (ppm)	10.0	10.0	2.60	1.40 – 2.60	2024	Runoff from fertilizer use; Erosion of natural deposits	No	0
Tetrachloroethylene (ppb)	5.00	0.00	0.99	0.99 - 0.99	2024	Discharge from factories and dry cleaners	No	0
Unregulated Contaminants								
Bromacil	n/a	70.0	0.14	0.140 - 0.140	2023[2]	Runoff from herbicide used on rights of way	n/a	0
Chlorate (ppb)	n/a6	210	42.0	11.0 – 42.0	2024	Byproduct of the disinfection process	n/a	0
Chloride[5] (ppm)	250[4,6]	n/a	21.0	19.0 – 21.0	2024	Naturally occurring	n/a	0
Hexavalent Chromium (CrVI) (ppb)	n/a[6]	13.0	0.65	0.30 - 0.65	2024	Naturally occurring; Industrial discharge	n/a	0
Sodium (ppm)	n/a[4]	60.0	20.0	20.0 – 20.0	2023[2]	Naturally occurring	n/a	0
Strontium (ppb)	n/a[6]	4000	70.0	58.0 – 70.0	2022[2]	Naturally occurring	n/a	0
Sulfate (ppm)	250[4]	n/a	6.30	4.50 – 6.30	2024	Naturally occurring	n/a	0
Vanadium (ppb)	n/a[6]	21.0	23.0	22.0 – 23.0	2022[2]	Naturally occurring	n/a	0

Internal Monitoring of PFAS Contaminants in the BWS Source Water — **Table 1-1b**

Contaminants (units)	MCL (Allowed)	MCLG (Goal)	Hazard Index (HI)	Highest Average	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation	# of Sites Exceeding the Action Level
Perfluorohexanesulfonic acid (PFHxS) (ppt)	10.0	10.0	0.23	2.10	2.10 - 2.10	2024	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities	No	0

Contaminants in the Distribution System — **Table 1-2**

Contaminants (units)	MCL (Allowed)	MCLG (Goal)	Highest Level Detected	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation	# of Sites Exceeding the Action Level
Lead (ppb)	AL = 10	0	6.18*	nd - 6.18	2024	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder	No	0
Copper (ppm)	AL = 1.3	1.3	nd*	nd – 0.934	2024	Corrosion of household plumbing systems; Erosion of natural deposits	No	0

***For lead and copper: the 90th percentile concentration of the most recent round(s) of sampling, the number of sampling sites exceeding the action level, and the range of tap sampling results are shown.**

Disinfection Agent — **Table 1-3**

Contaminants (units)	MRDL (Allowed)	MRDLG (Goal)	Highest Average Level Detected	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation	# of Sites Exceeding the Action Level
Residual Chlorine (ppm)	4	4	0.36	0.3 - 0.5	2024	Water additive used to control microbes	No	0

Disinfectant Byproducts — **Table 1-4**

Contaminants (units)	MCL (Allowed)	MCLG (Goal)	Highest Level Detected	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation	# of Sites Exceeding the Action Level
Tetrachloroethylene (TCE) (ppb)	5	0	nd	nd[1]	2024	Discharge from factories and dry cleaners	No	0

Navy – Internal Monitoring of TCE, PCE, and CCl4 at Camp Stover — **Table 1-5**

Contaminants (units)	MCL (Allowed)	MCLG (Goal)	Highest Level Detected	Range of Detection	Year of Sample	Typical Sources of Contaminants	Violation	# of Sites Exceeding the Action Level
Trichloroethylene (TCE) (ppb)	5	0	nd	nd[1]	2024	Discharge from metal degreasing sites and other factories.	No	0
Tetrachloroethylene (PCE) (ppb)	5	0	0.92	0.92[1]	2024	Discharge from factories and dry cleaners	No	0
Carbon tetrachloride (CCl4) (ppb)	5	0	nd	nd[1]	2024	Discharge from chemical plants and other industrial activities	No	0

Table Definitions:

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

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.

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.

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.

MRDLG **Maximum Residual Disinfectant 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 contamination.

Table Abbreviations:

n/a not applicable.

nd not detectable at testing limits.

ppb parts per billion or micrograms per liter.

ppm parts per million or milligrams per liter.

ppt parts per trillion or nanograms per liter.

Table Notes:

1. Only one sample collected.
2. The State and EPA require us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. The date of the last sample collected is as indicated.
3. These results are for informational purposes. There are no set standards. EPA will use this data to help determine where certain contaminants occur and whether it needs to regulate these contaminants. Currently, these contaminants do not have MCLs or MCL
4. National Secondary Drinking Water Regulations (NSDWRs), or secondary standards, are non-enforceable guidelines regulating contaminants that may cause cosmetic or aesthetic effects in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply with the standard.
5. After each quarter, a running average is calculated using the preceding 12 months of data. This value is the highest running average for the year

Note: 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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline 1-800-426-4791.