



U.S. Naval Support Facility Diego Garcia

CONSUMER CONFIDENCE REPORT 2024



Annual Report on Drinking Water Quality



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Consumer Confidence Report

FOREWORD

I am pleased to present the 2024 Consumer Confidence Report (CCR) for the U.S. Naval Support Facility (NAVSUPPFAC) Diego Garcia. This annual report is an essential tool for keeping you informed about the quality of our drinking water. Inside, you will find comprehensive details regarding the sources of our water, the results of our monitoring efforts, and our unwavering commitment to not only meet but exceed established drinking water standards.

Over the past year, our dedicated team has conducted extensive water monitoring, consistently ensuring that the water supplied by our DG Main Water System meets all regulatory requirements. We implement strict quality assurance measures designed to protect the health and well-being of all our consumers.

As we look ahead, we remain focused on transparency and are excited to share our ongoing and upcoming initiatives aimed at enhancing our water treatment processes. These improvements will fortify our system's resilience and prepare us for any future challenges. Our proactive approach to maintaining high water quality standards illustrates our commitment to effectively serving our island community.

Moreover, I want to emphasize our collective responsibility to protect our water sources. By fostering awareness and encouraging active community engagement, we can ensure a sustainable future for all DG residents. Together, we can safeguard the invaluable resource of clean drinking water for generations to come.

Thank you for your trust and support as we continue our mission to provide safe, high-quality drinking water. Your health and safety remain our top priority.



B. A. JAMISON
Captain U.S. Navy
Commanding Officer
Naval Support Facility
Diego Garcia

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Diego Garcia Overview

Diego Garcia is an isolated low-lying coral atoll located approximately 7 degrees south of the equator in the center of the Indian Ocean. It is the largest of over 50 coralline islands that comprise the Chagos Archipelago. The main exposed island mass of Diego Garcia is approximately 40-mile long narrow strip, shaped like a hollow footprint (Figure 1) and surrounded by a fringing reef with three small islets delineating the northern boundary of the atolls.



Diego Garcia Final Governing Standards (DGFGS)

The Diego Garcia Final Governing Standards (DGFGS) provides the environmental compliance criteria and management practices used by the U.S. Department of Defense installations and activities on Diego Garcia.

These compliance criteria were developed by comparing and adopting the protective criteria of DoD Manual 4715.05-G (Overseas Environment Baseline Guidance Document), applicable environmental laws, regulations and ordinances, and international agreements that collectively constitute the Bilateral Agreements on the use of Diego Garcia by both United Kingdom (host nation) and the United States.

Overseas installations are required to continue to meet site-specific Final Governing Standards (FGS) and other applicable requirements, in-theater commander directives, Department of Defense (DOD) and service policies as applicable.

Navy Overseas Drinking Water Program Ashore

Navy policy requires that all U.S. Navy overseas installations operate, maintain, and manage their drinking water systems to protect public health and safety. All U.S. Navy installations are required to meet or exceed U.S. National Primary Drinking Water Regulations (NPDWR) under the Safe Drinking Water Act of 1974, to ensure overseas drinking water systems meet the same water quality as required in the United States. In this regard, Commander, Navy Installations Command (CNIC), as the Navy Executive Agent (EA) for Drinking Water Ashore, issued CNIC Instruction 5090.1B as a Navy policy guidance for drinking water quality compliance. The most recent version, CNIC Manual 5090.1A (Navy Overseas Drinking Water Program Ashore), is dated on 15 Mar 2021.

CNIC Manual 5090.1A discusses the requirements, delineates responsibilities, and issues site-specific policy guidance on the management of drinking water quality at U.S. Navy installations outside the jurisdiction of the U.S. Environmental Protection Agency (USEPA). These include a triennial Sanitary Survey (audit) of the drinking water systems to verify compliance.

Diego Garcia ODW Program Organization and Oversight

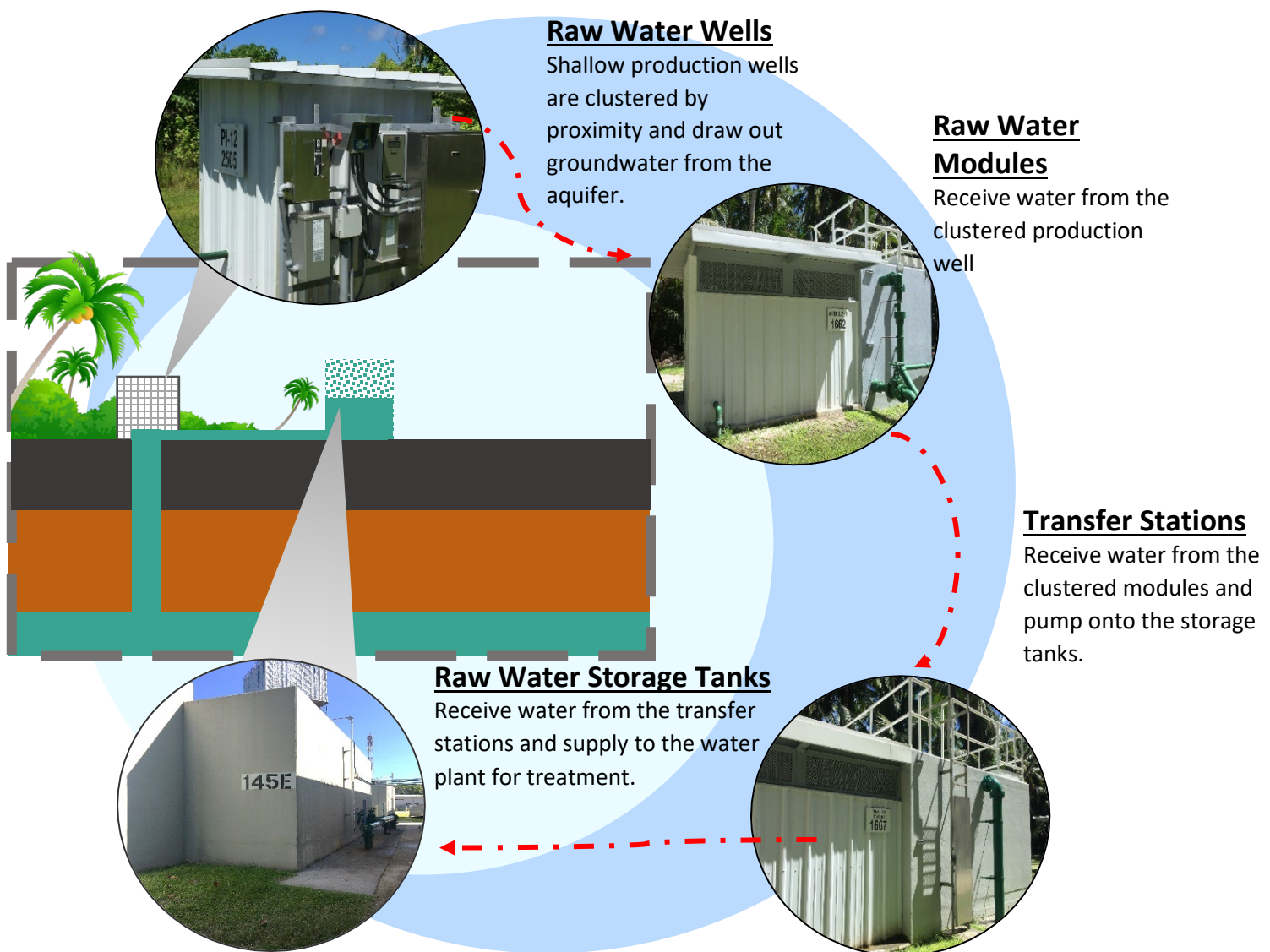
Per Navy policy, NAVSUPFAC Diego Garcia established the Installation Water Quality Board (IWQB) under the chair of its Commanding Officer (not delegable) in April 2014. IWQB manages the Diego Garcia ODW Program and reports all ODW matters to the Regional Water Quality Board (RWQB) and Water Quality Oversight Council (WQOC). This includes implementing and ensuring the ODW program compliance and communicating to stakeholders.



Navy Region Japan RWQB oversees Diego Garcia's ODW program and ensures compliance and consistency but does not have program primacy. The RWQB reports to the WQOC. The Navy WQOC is the overall governing body and reports on a regular basis to the Navy EA for ODW program ashore. CNIC, as the Navy EA for Drinking Water Ashore, provides overall ODW program authorities.

Source of Water

The Diego Garcia Water Systems' source of water is a combination of **surface water** and **groundwater under the direct influence of surface water (GWUDISW)**. This is due to the aquifers' shallow nature and susceptibility to contamination from surface runoff percolating through the ground. Shallow vertical and horizontal production wells pump water from the groundwater located at Air Ops and Cantonment areas. A series of well modules (1,000-gallon capacity reinforced concrete transfer tanks) receives water from the wells and transports the water to one of two transfer stations, then to the raw water storage tanks of the main water treatment plants situated at Cantonment and Air Ops. It is paramount we protect our aquifers because of the limited alternatives for water resources on the island. Through site surveys and source water assessments, potential sources of contaminations have been identified and characterized. Additionally, recommended measures have been outlined to minimize or eliminate contamination from surface activities. The Public Works Department Environmental Division, Navy Support Facility Diego Garcia is responsible for maintaining the assessment reports for recordkeeping.



Fact:

Diego Garcia's main source water is rainwater percolating into the ground.

Diego Garcia Water Treatment & Distribution Systems



On 28 February 2018, Diego Garcia's water system was declared "fit for human consumption" (FFHC). The Navy ODW program uses the term FFHC vice "potable" as a matter of water quality policy.

As of May 2024, NAVSUPFAC Diego Garcia has been granted another three years of Conditional Certificate to Operate (CTO) for its water system pursuant to the most recent Sanitary Survey in 2023. The RWQB grants a full CTO when an installation water system has zero significant deficiencies identified during its latest Sanitary Survey, or when all previously identified significant deficiencies have been corrected prior to its next scheduled triennial Sanitary Survey.

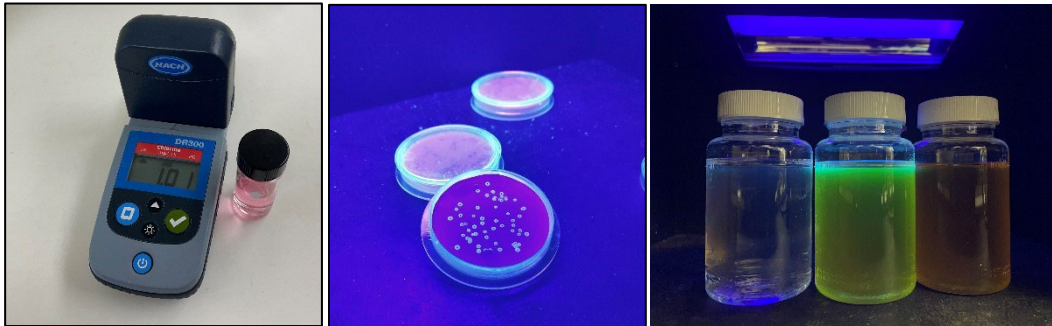
DG Main Water System

The DG Main Water Treatment Plant (WTP) is located at the downtown area of Diego Garcia. It began operation in Dec 2016. This plant employs several treatment methods to ensure the delivery of quality drinking water: Pressure filtration--removes particulates, sediments and turbidity; Nanofiltration (NF)--reduces a high percentage of salts and, naturally-occurring organic compounds that may react with chlorine to form harmful disinfection byproducts; Ultraviolet disinfection (UV) and Chlorination--a dual approach that provides inactivation of microbial pathogens. Chlorination is also utilized to maintain residual chlorine and ensure ongoing protection against viruses and other contaminants. The plant treats water extracted from the Cantonment and Air Ops water wells and produces and supplies FFHC water to the Cantonment-Air Ops distribution system from the Cantonment area to Thunder Cove. Additionally, it also fills water trucks that deliver to remote sites' storage tanks for distribution and 5-gallon bottled water containers for various offices.

DG Main WTP has become the sole water supply system for the entire installation since Dec 2023, due to the decommissioning of the Nanofiltration Hauled Water and Sub Site small water systems.

Water Quality Data

Laboratory Testing



Both DGFGS and CNIC M-5090.1A require testing of drinking water for contaminants on a regular basis to protect the consumer's public health and safety. The BOS contractor performs water sampling and quality monitoring. As of May 2024, the DG Water laboratory has been officially approved by WQOC as an on-site drinking water lab for drinking water compliance testing of specific analytes, including total coliform, E-coli, residual chlorine, pH, conductivity, heterotrophic plate count, chloride and turbidity. Maintaining a disinfectant residual in the water ensures protection against any microbial contamination.

In addition to on-island testing, the BOS contractor regularly collects and ships water samples to the U.S.-accredited Regional Public Health Center (PHC) Laboratories located at U.S. Army Base in Camp Zama, Japan for additional required testing analyses to determine the presence of other potential contaminants. The Regional PHC Laboratories received accreditation from the American National Standard Institute American Association for Laboratory Accreditation (A2LA) for ISO/IEC 17025: General requirements for competence of testing and calibration laboratories. Among the potential contaminants tested are inorganic and organic chemical (volatile organics and synthetic organics), radionuclide, disinfection byproducts (DBPs), lead and copper and per- and polyfluoroalkyl substances (PFAS).

The Navy Public Works Environmental and Production (Utilities) Divisions thoroughly assess the test results received from both laboratories in accordance with applicable DGFGS criteria and Navy policy; also, routinely upload the water quality data to the CNIC ODW Repository ensuring easy access to these information for further evaluation and reporting to both the RWQB and WQOC.

Furthermore, the Preventive Medicine Department of the U.S. Navy Medicine Readiness and Training Unit (NMRTU) Diego Garcia conducts regular health and sanitation inspections of the DG Water systems and facilities, along with monthly independent medical surveillance testing for bacterial and halogen presence. Any discrepancies identified are promptly reported to PWD for immediate investigation, and corrective or preventive actions.


In 2024, nearly 33,000 tests were conducted to monitor Diego Garcia's water quality. Appendix A (Water Quality Data) presents a comprehensive summary of the water quality monitoring results highlighting detected contaminants. Contaminants that were tested for, but not detected are not included in this report.





What Should You Know About Certain Contaminants?


As water travels over the surface of the land or percolates through the ground, it dissolves naturally-occurring minerals. It can also pick up other substances resulting from the presence of animals or human activity. Diego Garcia water systems may reasonably produce water containing at least trace amounts of some contaminants. However, the presence of these contaminants does not necessarily indicate that water poses a health risk.


Contaminants in Source Water

 **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.


 **Pesticides and Herbicides**, which may come from various sources such as agriculture, urban stormwater runoff, and residential uses.

 **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.

 **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.

Contaminants in Drinking Water

 **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. 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. 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 are available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead



Copper. Copper levels are found naturally in groundwater and surface water. Copper levels in water are generally very low; approximately 4 micrograms of copper in one liter. However, drinking water may contain higher levels of a dissolved form of copper. Increased levels of copper can occur when corrosive water comes in contact with copper plumbing in the water supply system. Cases of copper poisoning have led to anemia and to the disruption of liver and kidney functions. Immediate effects from drinking water extremely elevated levels of copper include vomiting, diarrhea, stomach cramps and nausea.



Coliforms. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present in drinking water. It is a warning of potential problems if coliforms are found in more water samples than allowed. The presence of bacteria does not mean the water is unsafe to drink. Only disease-causing bacteria, known as pathogens, lead to disease. Total coliform bacteria (without the presence of E. coli) are generally not considered harmful, but their presence indicates a potential pathway for contamination to enter drinking water. Fecal coliforms or E. Coli are a particular type of coliform bacteria. Their presence in drinking water is more serious than other coliform bacteria because they are disease-causing and also indicate that drinking water has been contaminated by sewage or animal wastes that contain other disease-causing microorganisms. This type of contamination can cause severe diarrhea, cramps, and nausea.

Inorganic Contaminants



Barium. Barium is a divalent cation and alkaline earth metal that can be found in naturally occurring mineral deposits. The health effects of the different barium compounds depend on how well the compound dissolves in water. Barium compounds that do not dissolve well in water are not generally harmful and are often used by doctors for medical purposes. Those barium compounds that dissolve well in water may cause harmful health effect in people. Ingesting high levels of dissolved barium compounds over the short term has resulted in difficulties in breathing, increased blood pressure, changes in

heart rhythm, stomach irritation, brain swelling, muscle weakness, and damage to the liver, kidney, heart, and spleen.



Fluoride. Fluoride is an inorganic ion naturally found in drinking water because of its presence in the earth's crust or from human activities that release fluoride to the environment. Exposure over many years to drinking water with fluoride levels above 4 mg/L may result in cases of crippling skeletal fluorosis, which is serious bone disorder resembling osteoporosis and characterized by extreme density and hardness and abnormal fragility of the bones (sometimes called "marble bones").



Sodium. Sodium is an essential element required for normal body function including nerve impulse transmission, fluid regulation, and muscle contraction and relaxation. However, in excess amounts, sodium increases individual risk of hypertension, heart disease, and stroke. One of the chief sources of sodium is the consumption of salt; therefore, salt restrictions are often recommended as a first-line treatment for individuals suffering from these conditions.



Nitrites and Nitrates. Nitrites and nitrates are nitrogen-oxygen chemical units which combines with various organic and inorganic compounds. Once taken into the body, nitrates are converted into nitrites. Once ingested, conversion of nitrate to nitrite takes place into the saliva of people of all ages, and in gastrointestinal tract of infants. Nitrites and nitrates have the potential to cause the following effects from a lifetime exposure at levels above the MCL: diuresis, increased starchy deposits and hemorrhaging of the spleen.

Disinfection Byproducts (DBP)



Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). TTHM and HAA5 are groups of chemicals formed when the naturally occurring organic materials in raw water reacts with the chlorine which is added as disinfectant. The highest level allowed (Environmental Protection Agency's maximum contaminant level) for TTHM and HAA5 are 80 and 60 micrograms per liter and parts per billion, respectively. The source of organic materials in raw water is thought to be rainwater percolating through decaying vegetation in the wellfields. Potential health effects from exposure to TTHM and HAA5 depend on various factors, including concentration of the chemicals and duration and frequency of exposure. According to the USEPA (<https://www.epa.gov/your-drinking-water/table-regulated-drinking-water-contaminants#Byproducts>), some people who drink water containing TTHMs in excess of the MCL over many years may experience liver, kidney, or central nervous system problems and increased risk of cancer.



Per- and Polyfluoroalkyl Substances (PFAS)

What are PFAS 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 1940. 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 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 26, 2024, the USEPA established MCLs for a subset of PFAS chemicals. The USEPA 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
- 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 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 Maximum Contaminant Levels (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 size of the drinking water system. In addition to the six regulated compounds, DOC-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

Additional
Information
About Your
Water

Does your Drinking Water Taste or Smell Bad?

A change in your water's taste, color, or smell is not necessarily a health concern. These effects are caused when some naturally occurring constituents occur at concentrations high enough to be a nuisance. Most nuisance constituents occur naturally. They result from the reaction of groundwater with aquifer rocks and sediments as the water moves underground. However, sometimes a change of smell or taste can be a sign of problems. If you notice a change in your water, call **Water Plant** at **370-2755** to request investigation.

Small amounts of Contaminants in Drinking Water

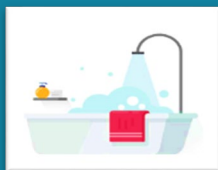
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or visit their website: <https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>

For Customers with Special Health Concerns

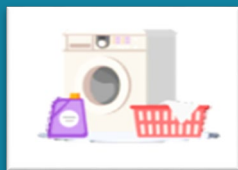
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants 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 microbiological contaminants are available from the **Safe Drinking Water Hotline** at **1-800-426-4791**.

A “cross-connection” is any connection between a public drinking water system and a separate source of questionable quality.

For example, an ordinary garden hose submerged in a bucket of water, car radiator, or swimming pool can result in backflow contamination. To protect our water supply, all outdoor faucets with a potential for a garden hose connection must each have a simple screw-on vacuum breaker.



Take shorter
showers



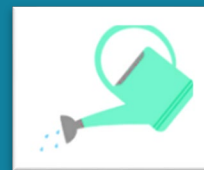
Wash only full
loads of laundry



Check for leaks. Report
all leaks to 112



Avoid letting the water
run while brushing your
teeth



Avoid over watering
your plants





Questions on how we carry out drinking water requirements?

Installation Drinking Water Compliance Program Manager
DSN (315) 370-4540

Installation Environmental Program Director
DSN (315) 370-4542

Questions about water production and treatment?

Installation Production Officer
DSN (315) 370-4543

Questions about health effects of potential contaminants in water?

Installation Preventive Medicine Authority
DSN (315) 370-4258

Appendix A: 2024 Water Quality Data



Table 1. WATER QUALITY DATA FOR DETECTED CONTAMINANTS: MAIN WATER SYSTEM
(Data from January – December 2024)

Inorganic Chemicals – Annual and quarterly* sampling and testing						
Contaminant ^(a)	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources/Remarks*
Barium	2 ppm	2 ppm	0.0930 ppm	0.0028 – 0.0930 ppm	No	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Sodium	N/A	N/A	34 ppm	29-34 ppm	N/A	*No MCL & MCLG established. Monitoring is required so concentration levels can be made available upon request.
Volatile Organic Contaminants – Quarterly sampling and testing						
Contaminant ^(a)	Highest Level Allowed (EPA's MCL)	Ideal Goal (EPA's MCLG)	Highest Result	Range of Test Results	Violation	Typical Sources
Total Xylenes	10 ppm	10 ppm	0.0022 ppm	<0.0005 – 0.0022 ppm	No	Discharge from petroleum factories and chemical factories
Disinfectant – Monthly sampling and testing						
Contaminant ^(a)	Highest Level Allowed (EPA's MRDL)	Ideal Goal (EPA's MCLRG)	Highest Result	Range of Test Results	Violation	Typical Sources
Residual Chlorine	4 ppm	4 ppm	1.75 ppm	0.65 – 1.75 ppm	No	Water additive used to control microbes
Disinfection Byproducts – Quarterly sampling and testing						
Contaminant ^(a)	Highest Level Allowed (EPA's MCL, Quarterly Average)	Ideal Goal (EPA's MCLG, Quarterly Average)	Highest Result (Quarterly Average)	Range of Test Results (Quarterly Average)	Violation	Typical Sources
Total Trihalomethane (TTHM)	80 ppb	N/A	10.9 ppb	6.4 – 10.9 ppb	No	Byproduct of drinking water disinfection
Halo-acetic Acid (HAA5)	60 ppb	N/A	7.0 ppb	4.9 – 7.0 ppb	No	Byproduct of drinking water disinfection
Bacteria in Tap Water - Monthly sampling and testing						
Contaminant ^(a)		Highest Level Allowed (EPA's MCL) ^(b)	Ideal Goal (EPA's MCLG)	Highest Percentage of Samples with Total Coliform	Violation	Typical Sources
Total Coliform (including fecal coliform and E. Coli)		5% of monthly samples are positive	0	0 %	No	Coliforms are naturally present in the environment. Fecal coliforms and E. Coli only come from human and animal fecal waste
How to read the Water Quality Data Tables Diego Garcia Final Governing Standards and Navy policy establishes the safe drinking water standards based on National Primary Drinking Water Regulations that limit the amount of contaminants allowed in drinking water. Tables 1 and 2 show the concentrations of detected contaminants or substances in comparison to regulatory limits. Contaminants or substances not detected are not included in the tables.						
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a system must follow.						
Maximum Contaminant Level (MCL): 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.						
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.						
Maximum Residual Disinfectant Level (MRDL): 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.						
Maximum Residual Disinfectant Level Goal (MRDLG): 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.						
Units in the table:						
ppm – Parts per million (also expressed as milligrams per liter or 1 drop in 1 million gallons)		ppb – Parts per billion (also expressed as micrograms per liter or 1 drop in 1 billion gallons)		< - symbol meaning “less than” the value next to the symbol (ex: “<5” means “less than 5”)		N/A – Not applicable; not required or no requirement



Table 2.A. MONITORING FOR 25 PER- and POLYFLUOROALKYL SUBSTANCES (PFAS)

Contaminant	Test Results Main Water	Units	EPA MCL Levels	MRL	MCLG	Violation
EPA METHOD 533						
11CI-PF3OUdS/F53B Major	ND	ppt	N/A	1.8	N/A	N/A
4:2 Fluorotelomer sulfonic acid	ND	ppt	N/A	1.8	N/A	N/A
6:2 Fluorotelomer sulfonic acid	ND	ppt	N/A	1.8	N/A	No
8:2 Fluorotelomer sulfonic acid	ND	ppt	N/A	1.8	N/A	N/A
9CI-PF3ONS/F53B Minor	ND	ppt	N/A	1.8	N/A	N/A
DONA / ADONA Acid	ND	ppt	N/A	1.8	N/A	N/A
HFPO-DA / Gen X Acid	ND	ppt	10	1.8	10	N/A
NFDHA	ND	ppt	N/A	1.8	N/A	N/A
Perfluorobutanesulfonic acid	ND	ppt	N/A	1.8	N/A	N/A
Perfluorobutanoic acid	ND	ppt	N/A	1.8	N/A	N/A
Perfluorodecanoic acid	ND	ppt	N/A	1.8	N/A	N/A
Perfluorododecanoic acid	ND	ppt	N/A	1.8	N/A	N/A
Perfluoroheptane sulphonate	ND	ppt	N/A	1.8	N/A	N/A
Perfluoroheptanoic acid	ND	ppt	N/A	1.8	N/A	N/A
Perfluorohexanesulfonic acid	ND	ppt	10	1.8	10	N/A
Perfluorohexanoic acid	ND	ppt	N/A	1.8	N/A	N/A
Perfluorononanoic acid	ND	ppt	10	1.8	10	N/A
Perfluorooctanesulfonic acid	ND	ppt	4	1.8	0	No
Perfluorooctanoic acid	ND	ppt	4	1.8	0	No
Perfluoropentane acid	ND	ppt	N/A	1.8	N/A	N/A
Perfluoropentanesulfonic acid	ND	ppt	N/A	1.8	N/A	N/A
Perfluoroundecanoic acid	ND	ppt	N/A	1.8	N/A	N/A
PES	ND	ppt	N/A	1.8	N/A	N/A
PFECA A	ND	ppt	N/A	1.8	N/A	N/A
PFECA F	ND	ppt	N/A	1.8	N/A	N/A
EPA METHOD 537.1						
11CI-PF3OUdS/F53B Major	ND	ppt	N/A	2.0	N/A	N/A
9CI-PF3ONS/F53B Minor	ND	ppt	N/A	2.0	N/A	N/A
DONA / ADONA Acid	ND	ppt	N/A	2.0	N/A	N/A
HFPO-DA / Gen X Acid	ND	ppt	10	2.0	10	N/A
NEtFOSAA	ND	ppt	N/A	2.0	N/A	N/A
NMeFOSAA	ND	ppt	N/A	2.0	N/A	N/A
Perfluorobutanesulfonic acid	ND	ppt	N/A	2.0	N/A	N/A
Perfluorodecanoic acid	ND	ppt	N/A	2.0	N/A	N/A
Perfluorododecanoic acid	ND	ppt	N/A	2.0	N/A	N/A
Perfluoroheptanoic acid	ND	ppt	N/A	2.0	N/A	N/A
Perfluorohexanesulfonic acid	ND	ppt	10	2.0	10	N/A
Perfluorohexanoic acid	ND	ppt	N/A	2.0	N/A	N/A
Perfluorononanoic acid	ND	ppt	10	2.0	10	N/A
Perfluorooctanesulfonic acid	ND	ppt	4	2.0	0	No
Perfluorooctanoic acid	ND	ppt	4	2.0	0	No
Perfluorotetradecanoic acid	ND	ppt	N/A	2.0	N/A	N/A
Perfluorotridecanoic acid	ND	ppt	N/A	2.0	N/A	N/A
Perfluoroundecanoic acid	ND	ppt	N/A	2.0	N/A	N/A



Table 2.B. MONITORING THE RUNNING ANNUAL AVERAGE (RAA) FOR SIX PER- and POLYFLUOROALKYL SUBSTANCES (PFAS)

Sampling Location	Contaminants	EPA Method 533				EPA Method 537.1			
		Feb 2024 (Q1)	May 2024 (Q2)	Sep 2024 (Q3)	Nov 2024 (Q4)	Feb2024 (Q1)	May2024 (Q2)	Sep2024 (Q3)	Nov2024 (Q4)
F-1505 (POE at Cantonment)	PFOS	ND	ND	ND	ND	ND	ND	ND	ND
	PFOA	ND	ND	ND	ND	ND	ND	ND	ND
	HFPO-DA/Gen X Acid	ND	ND	ND	ND	ND	ND	ND	ND
	PFBS	ND	ND	ND	ND	ND	ND	ND	ND
	PFNA	ND	ND	ND	ND	ND	ND	ND	ND
	PFHxS	ND	ND	ND	ND	ND	ND	ND	ND
	Hazard Index	0	0	0	0	0	0	0	0
	Running Annual Average	0 (does not exceed 1) No violation of the HI MCL				0 (does not exceed 1) No violation of the HI MCL			
F-309 (POE at Air Ops)	PFOS	ND	ND	ND	ND	ND	ND	ND	ND
	PFOA	ND	ND	ND	ND	ND	ND	ND	ND
	HFPO-DA/Gen X Acid	ND	ND	ND	ND	ND	ND	ND	ND
	PFBS	ND	ND	ND	ND	ND	ND	ND	ND
	PFNA	ND	ND	ND	ND	ND	ND	ND	ND
	PFHxS	ND	ND	ND	ND	ND	ND	ND	ND
	Hazard Index	0	0	0	0	0	0	0	0
	Running Annual Average	0 (does not exceed 1) No violation of the HI MCL				0 (does not exceed 1) No violation of the HI MCL			

Has Diego Garcia tested its water for PFAS in 2024?

Yes. In 2024, samples were collected quarterly from the point of entry to the main water distribution system and tested for all 6 regulated and 25 detected compounds using EPA methods 533 and 537.1. Results are shown in Tables 2.A and 2.B.

DG Main Water PFAS below MRL

We are pleased to report that drinking water testing results for all PFAS covered by the above sampling methods indicate that the results meet the MCLs for all 6 regulated contaminants and show non-detect for the 25 compounds listed in table 2A.

What is Next?

NSFDG initial monitoring for PFAS in accordance with EPA requirements is complete. Based on the above tables, all results are below trigger levels. {Based on these

How to read PFAS Data Table		
New established MCL limits in accordance with the EPA regulation and DOD policy were used in this report.		
Hazard Index (HI): The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from chemical mixture. The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the highest level determined not to have risk of health effects		
Method Reporting Limit (MRL): The limit of detection for a specific target analyte for a specific sample after any adjustments have been made		
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.		
Running Annual Average (RAA): is calculated by taking the average of the four most recent individual quarterly samples.		
Units in the table:		
ppt – Parts per trillion or nanograms per liter	ND- non-detect or the contaminant has not been detected	N/A – Not applicable; not required or no requirement

results, the installation must begin triennial monitoring for PFAS in 2027.} In the interim, we will maintain a proactive approach by conducting quarterly monitoring over the next few years to ensure ongoing compliance with the MCLs and trigger levels.

Appendix B: Water Improvement Projects

Construction and Repairs		
Project Title	Purpose	Status or Planned Date
Replace Nano-filtration (NF) Membranes	Replace existing membranes to improve NF performance. Membranes have surpassed its life span	Completed in Dec 2024
Close Out Wells at Various Location	To close out monitoring wells at the Air that are recommended for high priority abandonment because their integrity has been compromised and major repairs would be required	Estimated Completion Date (ECD): 2025
Extend Well Casing of some wells at the Cantonment Area	To protect the wells against runoff, drainage problems and possible source water contamination.	Project awarded to KBR. Status: Work in progress ECD: 2025
Install Isolation Valve Between AO-10 to 15 & AO-2 to 9 Water line	Expose/reconnect and provide isolation valve for well water line	Project awarded to KBR. Status: Work in progress ECD: 2025
Repair Overflowing Recharge Tank and Various Equipment	To prevent the NF concentrate/reject water from percolating back to the ground	Awarded to JSK. Status: Work in progress ECD: 2026
Install Back-Up SCADA Computer Server	To provide resiliency to the existing server PC in case it fails to operate	Awarded to KBR Status: Work in progress ECD: 2025
Replace Water Treatment Plant Generator	To provide adequate auxiliary power at the Water Plant to ensure continuous water supply when the primary power has been interrupted.	Project awarded to ECC. Status: Work in progress ECD: 2025
Install Isolation Valves at F-148	To easily maintain the inlet and outlet of pressure filter	Project awarded to KBR ECD: 2025
Perform Repair to Water Tanks F-308, F-1655 and F-1503	To repair all leaks in the existing tanks and bring back the maximum storage capacity of each tank	Awarded to MVL Status: Work in progress ECD: 2026
Repair Air Ops Water Wells and Piping	To protect AO wells from flooding and potential sources of contamination	Project awarded to JSK. ECD: 2026
Repair Water Distribution Line at C-Site	Install PVC pipeline loop to maintain water required chlorine residual and preclude water stagnation	Target Award Date: Jul 2025
Provide Water Pipeline Loop at R-site	Install PVC pipeline loop to maintain water required chlorine residual and preclude water stagnation.	Target Award Date: Jul 2025
Replace Underground Water Pipe at Finger Pier	Repair and fix water leaks to reduce high water consumption	Target Award Date: Sep 202
Replace Well Instruments on 93 Wells at Cantonment Area	Replace existing defective Cantonment well instruments to include protection of instruments from direct sunlight and rainfall to properly operate and monitor the well system and track the impact of groundwater withdrawals on seawater intrusion.	Target Award Date: Nov 2025
Repair Double Check Valve Backflow Preventer Device	To comply with the requirements of Backflow Prevention and Cross Connection Control Program	Target Award Date: Nov 2025
Replace Flushing Tank and CIP Tank at the Water Plant	To increase the capacity of our CIP tank to 1500 gals that will prevent water overflow	Target Award Date: Nov 2025
Replace Hydro-pneumatic Tank at GEODDS	Need to provide a new tank due to excessive corrosion of the existing tank. New tank will resolve turbidity issue in the water supply at GEODDS	Target Award Date: Dec 2025
Construct Canopy and Louver at the Water Plant	To protect the water treatment chemicals from potential exposure to direct sunlight and provide sufficient spill containment pallet volume for spill protection.	Target award Date: FY2026
Repair Fiberglass Water Tanks with NSF 61 Tanks	Replace with NSF 61 certified tanks to ensure that tanks are made up of the components that are compliant with the drinking water quality standards and won't contaminate our drinking water	Target Award Date: Sep 2026
Critical Potable Water System Upgrade	This project addresses NSFDC's deficient potable water system by replacing the existing structurally degraded critical water tanks 1655 and 1503, and adding a new two 1-million gallons water storage tanks to reliably support continuous and safe FFHC water services	Target Award Date: FY2028

Install Post Filtration Aeration System at the Water Plant	Post filtration aeration will help in removing the hydrogen sulfide smell of the water	Status: For Scoping Estimates
Provide and Install 500K-Gallon Collapsible Water Bladder	To provide additional storage capacity in case of emergency	Status: For Scoping Estimates
Reverse Osmosis Water Purification Unit (ROWPU) or Tactical Water Purification System (TWPS)	To serve as interim filtration system(s) to the Main WTP. A pre-fabricated or custom-built treatment system where all units and components are installed on a frame; a plug-and-play approach.	Status: Work Request in process
MILCON P-116 Water Treatment Plant Filtration System	Install surface water treatment that will ensure the provision of safe drinking water complying with the EPA Surface Water Filtration requirements and to receive a full Certificate to Operate (CTO) from the Water Quality Oversight Council	Target Award Date: FY2027

Studies and Plans		
Project Title	Purpose	Status or Planned Date
Water Quality Improvement Study	Perform a comprehensive assessment of the current state of the drinking water treatment system and recommend options to upgrade the treatment to effectively treat for PFAS (and other compounds of concern)	Completed: Oct 2024
Potable Water Master Plan	To assess the capacity, condition, and reliability of the Potable Water Systems in meeting present and future needs and provide recommendations to address identified deficiencies	Target Completion Date: FY2025
Lead and Service Lines and Lead Plumbing Survey	Prepare initial service line inventory templates, report, outline of steps required to develop a lead service line replacement plan, and a GIS geodatabase for DG.	Target Completion Date: Dec 2025
NSFDG Control System and Cyber Engineering Study	Execute a study for the Main Water Treatment Plant (F-148) to upgrade the SCADA systems, fix the data historian, and implement cybersecurity requirements.	Target Award Date: FY2025

Appendix C:

Surface Water Treatment Rule- Failure to Filter

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

The U.S. Naval Support Facility (NAVSUPFAC) Diego Garcia (DG) Water Treatment Plant does not meet the USEPA Surface Water Treatment Rule Filtration requirements. However, our drinking water remains **Fit for Human Consumption (FFHC)**. This situation does not require that you take immediate action, but Navy Policy (CNIC M-5090.1A) requires issuance of this Public Notification (PN) because as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

The Surface Water Treatment Rule requires NAVSUPFAC DG to have a filtration process upgrade in addition to our current nano filtration and disinfection processes because we do not have a complete watershed control program in place.

What does this mean?

This is NOT an emergency. If it had been, you would have been notified within 24 hours of discovery. We do not know of any cases of disease-causing organisms contaminating the water supply. Until the filtration improvements are in place, there is an increased chance that disease-causing organisms could contaminate the water supply. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms, however, are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What should I Do?

- You do not need to boil your water. However, if you have specific health concerns, consult your doctor. A home filter will not necessarily solve the problem, because not all home filters protect against parasites. Call the National Sanitation Foundation (NSF) International at 1(800) NSF-8010 or the Water Quality Association at 1(800)749-0234 for information on appropriate filters.
- If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your healthcare providers about drinking this water. General guidelines on ways to lessen the risk of infection by microbes are available on the EPA Ground Water and Drinking Water Website at <https://www.epa.gov/ground-water-and-drinking-water>.

What is being done?

NAVSUPFAC DG currently uses adequate chlorination and ultraviolet disinfection to inactivate these organisms. The disinfection processes are operating effectively to inactivate these organisms and the drinking water remains Fit for Human Consumption.

Surface Water Treatment Rule – compliant filtration, in combination with adequate disinfection, is the best method for ensuring removal of the organisms. NAVSUPFAC DG is programmed for installation of a SWTR-compliant filtration system in FY2027. Until this required filtration is installed, you will receive an updated Notice similar to this every three months.

For more information, please contact:

Installation Drinking Water Compliance Program Manager
DSN (315) 370-4540

Installation Environmental Program Director
DSN (315) 370-4542

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or distributing copies by hand or mail.

Appendix D:

Notice of Failure to Develop Initial Inventory of Drinking Water Service Lines

From: U.S. Naval Support Facility (NAVSUPPFAC) Diego Garcia (DG)

To: DG Drinking Water Consumer

1. Our public water system is focused on protecting the health of every person living and working in our facilities and housing on our installations. This notice contains important information about your drinking water. Please share this information with anyone who consumes water (drinking, showering, bathing, dishwashing, cooking, and oral hygiene) at this location. In addition to the people directly served at this property, this should include people in barracks, housing (unaccompanied and transient), military treatment facilities, and workplaces.

2. We were required to develop and make publicly available an initial inventory of service lines connected to our distribution system by October 16, 2024. Our system failed to submit this initial inventory of service lines to Commander, Navy Installations Command (CNIC). The inventory must identify the service line materials as galvanized, lead, non-lead or unknown. We are working diligently to identify and ultimately remove lead and galvanized service lines as soon as possible. This an important way to protect public health.

3. Because your service line material is unknown, there is the potential that some or all of the service line could be made of lead or galvanized pipe that was previously connected to lead.

4. Galvanized service lines that have adsorbed lead can contribute to lead in drinking water.

5. People living in homes with a galvanized service line, that has adsorbed lead, may have an increased risk of exposure to lead from their drinking water.

6. NAVSUPPFAC DG current water quality is in compliance with U.S. Environmental Protection Agency (EPA) Lead and Copper Rule action levels, but we are committed to further investigation to determine if these lines require replacement.

7. If you have questions concerning any of the information provided in this notice, contact 370-4540, or if you have information that could help us better describe your service line, contact 370-4543

8. **Health effects of lead:** Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or worsen existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have an increased risk of these negative health effects. Adults can have increased risks of heart disease, high blood pressure, and kidney, or nervous system problems.

9. **Steps you can take to reduce lead in drinking water:** Below are recommended actions that you may take, separately or in combination, if you are concerned about lead in your drinking water. The list also includes where you may find more information and is not intended to be a complete list or to imply that all actions equally reduce lead in drinking water.

- a) **Use your filter properly.** Using a filter can reduce lead in drinking water. If you use a filter, it should be certified to remove lead. Read any directions provided with the filter to learn how to properly install, maintain, and use your cartridge and when to replace it. Using the cartridge after it has expired can make it less effective at removing lead. Do not run hot water through the filter. For more information on facts and advice on home water filtration systems, visit EPA's website at <https://www.epa.gov/water-research/consumer-tool-identifying-point-use-and-pitcher-filters-certified-reduce-lead>.

- b) **Clean your aerator.** Regularly remove and clean your faucet's screen (also known as an aerator). Sediment, debris, and lead particles can collect in your aerator. If lead particles are caught in the aerator, lead can get into your water.
- c) **Use cold water.** Do not use hot water from the tap for drinking or cooking as lead dissolves more easily into hot water. Boiling water does not remove lead from water.
- d) **Run your water.** The more time water has been sitting in pipes the more lead it may contain. Before drinking, flush your home's pipes by running the tap, taking a shower, doing laundry, or doing a load of dishes. The amount of time to run the water will depend on whether your home has a lead service line or not, as well as the length and diameter of the service line and the amount of plumbing in your home. It is recommended to flush for at least 3 to 5 minutes before using water for drinking or cooking, especially if the water hasn't been used for several hours. For water that has been sitting overnight, flushing for 5 minutes or longer is advisable.

10. For more information on reducing lead exposure from your drinking water and the health effects of lead, visit EPA's website at <http://www.epa.gov/lead>.

To learn more about the quality of the drinking water on this installation, visit our Annual Consumer Confidence Water Quality Report at: <https://cnrj.cnrc.navy.mil/Operations-and-Management/Water-Quality-Information/Water-quality-reports/>

These notices can also be accessed at our Installation Drinking Water Webpage at: <https://flankspeed.sharepoint-mil.us/sites/CNICNRJHub/NSFDIEGOGARCIAJA>