U.S. NAVAL SUPPORT ACTIVITY NAPLES
SATCOM LAGO PATRIA

2023 DRINKING WATER
CONSUMER CONFIDENCE REPORT

Is our water safe to drink?

Yes. Naval Support Activity (NSA) Naples SATCOM Lago Patria (SATCOM) drinking water system provides water that is safe and "Fit For Human Consumption" (i.e. water that is safe for drinking, cooking, bathing, showering, dishwashing and maintaining oral hygiene) as determined by the Installation Commanding Officer's Record of Decision dated 27 February 2014 and as routinely confirmed by laboratory sampling results (received monthly, quarterly, and yearly). We are proud to support the Navy's commitment to provide safe and reliable drinking water to our service members and their families. This annual Consumer Confidence Report for calendar year 2023 includes general and mandatory information to educate everyone about our water sources, treatment processes, standard requirements, and other details to help assure you that our water is safe to drink.

Our drinking water fully complies with the Department of Defense's (DoD) Italy Environmental Final Governing Standards (FGS), which are derived from the U.S. DoD Overseas Environmental Baseline Guidance Document (OEBGD), the U.S. Environmental Protection Agency (EPA) and Italy's drinking water standards. When Italy and U.S. standards differ, the FGS adopts the *most protective* requirement. A detailed list of constituents found in our drinking water is included in this report, along with a comparison to the maximum levels considered safe for the public by these standards.

Where does our water come from and how is it treated?

SATCOM receives drinking water from the West Campania Aqueduct that collects ground and surface water from springs and wells in the Cassino area northwest of Naples. Chlorine dioxide for water disinfection is added at the Cassino and San Prisco Water Treatment Plants. Naval Facilities Engineering Systems Command (NAVFAC) Naples Public Works Department further treats the water and adds sodium hypochlorite as disinfectant to ensure that SATCOM's tap water meets all aforementioned regulatory requirements throughout the water distribution system.

Why are there contaminants in drinking water?

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Due to this, some contaminants may be present in source drinking water, such as:

- **Microbial contaminants**, such as viruses and bacteria, that may come from wildlife, sewage treatment plants, septic systems, and livestock;
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;

- **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;
- **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 storm water runoff, and septic systems; and
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, regulations limit the amount of certain contaminants in water provided by public water systems. Regular sampling is conducted to detect the level of contaminants in the water system. If the results are above regulatory limits, you will be notified by e-mail and Public Notification. You can learn more about contaminants and any potential health effects by visiting the EPA's Drinking Water Standards web site: https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations

Source water assessment

In July 2021, the Naval Facilities Engineering Systems Command (NAVFAC) together with the Navy and Marine Corps Public Health Center (NMCPHC) conducted a comprehensive sanitary survey of the SATCOM drinking water system. Sanitary surveys performed every three years provide an evaluation of the adequacy of the drinking water source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. NAVFAC is continually improving the drinking water system based on the recommendations contained in the sanitary survey reports.

Some people must use special precautions

There are people who 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the following USEPA Safe Drinking Water webpage https://www.epa.gov/ground-water-and-drinking-water

Additional information for lead

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. NAVFAC Naples Public Works is responsible for providing high-quality drinking water at SATCOM and has direct control over the materials used in plumbing components on the facility. This ensures that no lead service lines or components are used on the drinking water system. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the following USEPA Safe Drinking Water webpage: www.epa.gov/safewater/lead

Information for polyfluoroalkyl substances

What are per- and polyfluoroalkyl substances and where do they come from?
Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the U.S., since the 1940s. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) currently used for fighting petroleum fires at airfields and in industrial fire suppression processes. 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 US EPA established MCLs for a subset of PFAS chemicals.

Chemical	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (GenX Chemicals)	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
Mixture of two or more: PFHxS, PFNA, HFPO-DA, and PFBS	Hazard Index of 1 (unitless)	Hazard Index of 1 (unitless)

EPA requires implementation of sampling in accordance with the new MCLs within three years of the publication date and implementation of any required treatment within five years.

These limits did not apply for the 2023 calendar year because they had not been published. However, the DoD proactively promulgated policies to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every two years. The DoD policy states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than the 2016 EPA health advisory (HA) level of 70 ppt, water systems must take immediate action to reduce exposure to PFOS or PFAS. For levels less than 70 ppt but above the 4 ppt level (draft at the time of policy publication), DoD committed to planning for implementation of the levels once EPA's published MCLs take effect.

Has NSA Naples SATCOM tested its water for PFAS in 2023?

Yes. In July 2023, samples were collected from the SATCOM Water Treatment Plant.
We are pleased to report that drinking water testing results were below the Method Reporting Limit (MRL) for all 28 PFAS compounds covered by the sampling methods, including PFOA and PFOS. This means that PFAS were not detected in your water system. In accordance with DoD policy, we will continue to monitor the drinking water system for your continued protection.

Water Quality Data Table

During 2023, more than 700 tests were performed on SATCOM drinking water for over 150 contaminants. Unless otherwise noted, Tables 1 and 2 below only lists the contaminants that were detected during calendar year 2023. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. All contaminants detected in NSA Naples SATCOM's drinking water are below the Maximum Contaminant Levels (MCLs) allowed by FGS and EPA applicable requirements.

Table 1: Water Quality Data

Contaminants	MCLG or MRDLG	EPA MCL, TT, or MRDL	FGS MCL	Your Water	Range		Sample Year	Violation	Typical Source
					Low	High			
Disinfectants & Disinfection By-products (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)									
Chlorine (as Cl_2) (ppm)	4	4	4[1]	0.61[2]	0.22	0.61	2023	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	800	800	800[1]	40[2]	10	40	2023	No	Water additive used to control microbes
Chlorite (ppm)	0.8	1	0.70	0.091	ND	0.091	2023	No	By-product of drinking water disinfection
HAA5 [Haloacetic Acids](ppb)	NA	60	60[1]	2.16[2]	NA	2.16	2023	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb)	NA	80	30	13.30[2]	NA	13.30	2023	No	By-product of drinking water disinfection
Inorganic Contaminants									
Ammonium (ppm)	NA	NA	0.50	0.025	ND	0.025	2023	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Arsenic (ppm)	4	4	0.010	0.0012	NA		2023	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorides (ppm)	NA	250[3]	250	21.5	NA		2023	No	Erosion of natural deposits

Contaminants	MCLG or MRDLG	EPA MCL, TT, or MRDL	FGS MCL	Your Water	Range		Sample Year	Violation	Typical Source
					Low	High			
Fluoride (ppm)	4	4	4	0.15	NA		2023	No	Erosion of natural deposits; Water additive which
Nitrate [measured as Nitrogen] (ppm)	10	10	10	0.7	0.29	0.7	2023	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	NA	200	160	133.96	84.00	133.96	2023	No	Erosion of natural deposits
Sulfate (ppm)	NA		250	0.15	NA		2023	No	Discharge from mines and smelters and from kraft pulp and paper/textile mills and tanneries
Radioactive Contaminants (Tested every 4 years)									
Alpha emitters (pCi/L)	0	15	15	4	ND	4	2020	No	Erosion of natural deposits
Radium [Combined 226/228] (pCi/L)	0	5	5	0.6	0.049	0.6	2020	No	Erosion of natural deposits

NOTES:
***** For more information see the "Violations and Exceedances" section below
¹ MCL from DoD Manual Overseas Environmental Baseline Guidance Document (OEBGD)
² Samples collected in the drinking water distribution system
³ SMCL: EPA secondary MCL

Table 2: Contaminants at Consumer Taps

Inorganic Contaminants at Consumer Taps							
Contaminants	**MCLG**	**AL**	**Your Water**	**Sample Year**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Copper [Action level at consumer taps] (ppm)	1.3	1.3	0.019	2022	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead – [Action level at consumer taps] (ppb)	0	15	ND	2022	0	No	

Unit Descriptions	
Term	**Definition**
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppt	ppt: parts per trillion, or nanograms per liter (ng/L)
PQL	Practical Quantitation Limit of the best method
Important Drinking Water Definitions	
Term	**Definition**
AL	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.
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.
MNR	Monitored Not Regulated.
MPL	State Assigned Maximum Permissible Level.
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 disinfection level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
SMCL	Secondary Maximum Contaminant Level: The level of a contaminant established as a guideline that is not considered to present a risk to human health at the SMCL.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	EPA permission not to meet an MCL or a treatment technique under certain conditions.

Violations and Exceedances

No drinking water quality violations or exceedances occurred during 2023.

Points of Contact

If you have any questions regarding this report or about the drinking water treatment processes, please contact the Public Works Department Environmental Office, members of the Installation Water Quality Board, at DSN 626-6644 or commercial 081-568-6644.

For any health related questions, please contact the U.S. Naval Hospital Naples Preventive Medicine Office, members of the Installation Water Quality Board, at DSN 626-5486 or commercial 081-568-5486.