



# NAVSTA ROTA DRINKING WATER 2021 CONSUMER CONFIDENCE REPORT 01 JULY 2022



## What is a Consumer Confidence Report?

A Consumer Confidence Report (CCR) provides details about where your drinking water comes from, what it contains, and how it compares to standards set by regulatory agencies. It is required annually and includes general and mandatory information to educate everyone about our water source, water treatment processes, water quality requirements, and other details to help assure you Naval Station Rota water is safe to drink.

## Is our water safe to drink?

Yes. We are proud to support the Navy's commitment to provide safe and reliable drinking water to our service members and their families

NAVSTA Rota's drinking water system provides water that is safe to drink. In his role as the Chairman of the Installation Water Quality Board, the Installation Commanding Officer declared NAVSTA Rota's drinking water Fit for Human Consumption (e.g., potable) in a Record of Decision dated 17 December 2013. Since that time, routine monthly, quarterly and annual laboratory testing results conducted on a suite of chemical and biological constituents supports this declaration.

Our drinking water fully complies with the Department of Defense's (DOD) Spain Final Governing Standards (FGS), derived from U.S. Environmental Protection Agency (EPA) and Spain drinking water standards. When Spain and U.S. standards differ, the FGS adopts the *most protective* standard. A detailed list of constituents that we test for in our drinking water is included in this report, along with a comparison to the maximum levels considered safe for the public.

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

NAVSTA Rota purchases finished, treated water from the *Agencia Andaluza del Agua*. Water comes from the *Los Hurones* and *Guadalcacín* reservoirs and receives treatment at the *Cuartillos* water treatment plant where sedimentation and sand filtration removes contaminants and suspended solids and disinfection occurs with the addition of chlorine. The water then flows by gravity to the *San Cristóbal* ground storage facilities for customer distribution including NAVSTA Rota.

Water received from the *Agencia Andaluza del Agua* has continuous turbidity measurements at the point of entry to the installation. NAVSTA Rota stores finished drinking water in reservoir tanks and distributes water in a network of piping and pump stations. Due to the size of the NAVSTA Rota storage and distribution system, booster chlorination adds chlorine to our drinking water to ensure sufficient disinfection levels throughout the system. This additional chlorination can sometimes result in the creation of disinfection by-products, so granular activated carbon (GAC) filters located within the drinking water distribution system remove these contaminants.



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## Source Water Assessment

In May 2018, Naval Facilities Engineering Command (NAVFAC) conducted a comprehensive sanitary survey of the NAVSTA Rota drinking water system. This survey provided an evaluation of the adequacy of the drinking water source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. NAVSTA Rota is continually improving the drinking water system based on the recommendations in the report. A new sanitary survey will occur in June 2022 to reevaluate drinking water system compliance.

## Why are there contaminants in drinking water?

Drinking water, including bottled water, may 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 contaminants.

Due to this, some substances 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;
- **Disinfection products**, such as chlorine and chloramine used to remove pathogens from the water and disinfection by-products such as Trihalomethanes;
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- **Inorganic contaminants**, naturally occurring 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 in surface rocks or brought to the surface as the result of oil and gas production or mining activities.

NAVSTA Rota's drinking water is from the *Agencia Andaluza del Agua*, which uses rivers, lakes and reservoirs for its source water. 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 occurs to detect the level of contaminants in the water system.



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If the results of sampling conducted by NAVSTA Rota are above regulatory levels, notification will occur through the following:

- Coastline newspaper
- NAVSTA Rota Facebook: <https://www.facebook.com/USNavalStationRota>
- All-Hands" emails.

You can learn more about contaminants and any potential health effects by visiting the United States Environmental Protection Agency (EPA) Drinking Water Requirements website at <https://www.epa.gov/dwreginfo> or by calling the EPA Safe Drinking Water Hotline at +01-800-426-4791.

### 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 EPA's Safe Drinking Water Hotline: 1-800-426-4791.

### 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.

NAVSTA Rota Public Works is responsible for providing high-quality drinking water and has direct control over the materials used in plumbing components on the facility. This ensures that no lead service lines or components are in use within the drinking water system. As a general safety practice, whenever - and wherever - you plan to use tap water for drinking or cooking, you can minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes prior to use. Information on lead in drinking water and steps you can take to minimize exposure is available from the EPA Safe Drinking Water website: [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



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**Water Quality Data Table**

The table below lists all of the routine drinking water contaminants and relevant testing data collected during the 2021 calendar year. NAVSTA Rota tests for many more chemicals than are found in this table; only those contaminants detected in the water are presented in the table. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. All substances detected in NAVSTA Rota’s drinking water are below allowable levels and meet EPA and FGS requirements.

Contaminant	MCL, TT, or MRDL	Your Water (Average)	Range		Sample Date	Violation	Typical Source
			Low	High			
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	<b>0.83</b>	0.16	2.11	2021	No	Water additive used to control microbes
TTHMs -Total Trihalomethanes (ppb)	80	<b>45</b>	26	58	2021	No	By-product of drinking water disinfection
Total Coliform (positive samples/month)	0	<b>0</b>	N/A	N/A	2021	No	Naturally present in the environment. Used as an indicator that other, potentially-harmful, bacteria may be present
Dalapon (ppb)	200	<b>&lt;1</b>	<1	<1	2021	No	Runoff from herbicide used on rights of way
Barium (ppb)	2000	<b>59.5</b>	59	60	2021	No	Discharge of drilling wastes; Erosion of natural deposits
Chlorides (ppm)	250	<b>38.3</b>	37.8	38.9	2021	No	Erosion of natural deposits; Discharge from fertilizer and pesticides
Fluoride (ppm)	4	<b>&lt;0.5</b>	<0.5	<0.5	2021	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Manganese (ppb)	50	<b>1.2</b>	<1	1,4	2021	No	Erosion of natural deposits; Discharge from fertilizer
Aluminum (ppb)	200	<b>80.5</b>	79	82	2021	No	Natural in surface water; Used for water treatment
Sulfates (ppm)	250	<b>77.7</b>	74.8	80.6	2021	No	Erosion of natural deposits; Leaching
Nitrate [measured as Nitrogen] (ppb)	10000	<b>660</b>	500	820	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppb)	500	<b>&lt;10</b>	<10	<10	2021	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Gross Alpha (pCi/L)	2.7	<b>0.31</b>	0.11	0.42	2021	No	Erosion of natural deposits



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			Low	High			
Gross Beta (pCi/L)	27	<b>1.9</b>	0.84	3.1	2021	No	Decay of natural and man-made deposits.
Tritium (pCi/L)	2702	<b>91</b>	62	120	2021	No	Erosion of natural deposits
Radium 226+ Radium 228 (pCi/L)	5	<b>0.273</b>	0.108	0.567	2021	No	Erosion of natural deposits
Chromium (ppb)	50	<b>2.05</b>	2	2.1	2021	No	Erosion of natural deposits. Industry.
Nickel (ppb)	20	<b>3.2</b>	3.2	3.2	2021	No	Erosion of natural deposits. Industry.
Sodium (ppm)	200	<b>23.5</b>	23	24	2021	No	Erosion of natural deposits.

The table below lists drinking water contaminants and relevant testing data collected on a non-annual basis. The table below shows the most recent testing results.

Contaminant	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds MCL	Typical Source
Copper - action level at consumer taps (ppm)	1.3	<b>0.14<sup>(1)</sup></b>	2019	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	10	<b>1.6<sup>(1)</sup></b>	2019	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Cryptosporidium oocysts/liter <sup>(2)</sup>	< 0.075	<b>&lt; 0.036</b>	2020 to 2022	0	No	Animal waste
<sup>(1)</sup> 90 <sup>th</sup> Percentile						
<sup>(2)</sup> 24 Samples tested over a 24 month period						

Note: All other Synthetic Organic Compounds were not detected.



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<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
ng/l	ng/l: Nanogram/liter, or parts per trillion (ppt)
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.
CCR	Consumer Confidence Report
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.
MRLor RL	Method Reporting Limit: The lowest quantifiable reporting limit that can be achieved when an analysis is performed under ordinary laboratory conditions.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.



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If you have any questions regarding this report or about the drinking water processes, please contact one of the following:

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