



NAVAL SUPPORT FACILITY (NSF) DEVESELU 2020 DRINKING WATER CONSUMER CONFIDENCE REPORT



Is our water safe to drink?

Yes. Naval Support Facility (NSF) Deveselu provides water that is safe and Fit for Human Consumption (FFHC) as determined by the Installation Commanding Officer's Record of Decision dated October 15, 2014 for the Site Activation Area (SAA) and March 4, 2016 for the Main Base and as routinely confirmed by laboratory sampling results (received monthly, quarterly, and yearly).

Our drinking water fully complies with the Department of Defense's (DoD) Romania Final Governing Standards (FGS) which are derived from U.S. Environmental Protection Agency (EPA) and Romanian drinking water standards. When Romania and U.S. standards differ, the most protective requirement was adopted into the FGS. 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 general public by these standards.

Why are there contaminants in drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least 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 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, contaminants may be present in the source of drinking water, to include:

- **Microbial contaminants**, such as viruses and bacteria, that may come from wildlife, sewage treatment plants, septic systems, and livestock;
- **Disinfection by-products**, such as trihalomethanes (TTHM) that are byproducts of chlorinating water that contains natural organics. Some people who drink TTHM in excess of the maximum contaminant level (MCL) over many years may experience liver, kidney, or central nervous system problems, and may have an increased cancer risk;
- **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 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, EPA has regulations that 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 levels, you will be notified by e-mail and public notification. You can learn more about contaminants and potential health effects by visiting the EPA Drinking Water Standards web site:

<https://www.epa.gov/sdwa/how-epa-regulates-drinking-water-contaminants#standards>

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

NSF Deveselu provides treated groundwater supplied by three deep wells, one for the Site Activation Area (SAA) and two for the Main Base. For the SAA, source water is treated near the well head by disinfection using sodium hypochlorite prior to distribution. For Main Base the water source is treated by a Reverse Osmosis System and disinfection using sodium hypochlorite prior to distribution.

Source water assessment

Two comprehensive Sanitary Surveys of the NSF Deveselu drinking water system were conducted in September 2016 and September 2019 by the Naval Facilities Engineering Command (NAVFAC) together with the Navy and Marine Corps Public Health Center (NMCPHC). Sanitary Surveys are performed every three years and provide an evaluation of the adequacy of the drinking water source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. NSF Deveselu is continually improving the drinking water system based on the recommendations contained in the 2016 and 2019 Sanitary Survey reports. Currently, 40 percent of the open Sanitary Survey findings have been closed.

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 and Centers for Disease Control and Prevention (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 webpage www.epa.gov/safewater/sdwa or the EPA's Safe Drinking Water Hotline: 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. NSF Deveselu Public Works Department (PWD) is responsible for providing high quality drinking water, but cannot control

the variety of materials used in plumbing components. 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 water for drinking or cooking. Lead swab testing on the distribution system did not find any lead present. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/lead.

What are per- and polyfluoroalkyl substances (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 United States, 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) used for fighting petroleum fires at airfields and in industrial fire suppression processes because they rapidly extinguish fires, saving lives and protecting property. 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?

There is currently no established federal water quality regulation for any PFAS compounds. In May 2016, the EPA established a health advisory (HA) level at 70 parts per trillion (ppt) for individual or combined concentrations of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). Both chemicals are types of PFAS.

Out of an abundance of caution for your safety, the DoD's PFAS testing and response actions go beyond EPA Safe Drinking Water Act requirements. In 2020 the DoD promulgated a policy to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every three years.

The EPA's health advisory states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than 70 parts per trillion, water systems should quickly undertake additional sampling to assess the level, scope, and localized source of contamination to inform next steps

Has NSF Deveselu tested its water for PFAS?

Yes, in December 2020. Samples were collected from Main Base - Water Supply Building (WSB) and Site Activation Area (SAA) Administration Head #19, Tables 1a and 1b, respectively. We are pleased to report that drinking water testing results were below the Method Reporting Limit (MRL) for all 18 PFAS compounds covered by the sampling method, including PFOA and PFOS. This means that PFAS were not detected in your water system. In accordance with DoD policy, the water system will be resampled every three years for your continued protection.

PFAS Table 1a. Main Base

<u>Parameter</u>	<u>MRL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Violation</u>
Perfluorohexanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluoroheptanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorooctanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorononanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorodecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorotridecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorotetradecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorobutanesulfonic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorohexanesulfonic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorooctanesulfonic acid (ng/L)	1.7	<1.7	Nov 2020	No
NEtFOSAA (ng/L)	1.7	<1.7	Nov 2020	No
NMeFOSAA (ng/L)	1.7	<1.7	Nov 2020	No
Perfluoroundecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorododecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
HFPODA (ng/L)	1.7	<1.7	Nov 2020	No
9Cl-PF3ONS (ng/L)	1.7	<1.7	Nov 2020	No
11Cl-PF3OUdS (ng/L)	1.7	<1.7	Nov 2020	No
DONA (ng/L)	1.7	<1.7	Nov 2020	No

PFAS Table 1b. Site Activation Area

<u>Parameter</u>	<u>MRL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Violation</u>
Perfluorohexanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluoroheptanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorooctanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorononanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorodecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorotridecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorotetradecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorobutanesulfonic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorohexanesulfonic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorooctanesulfonic acid (ng/L)	1.7	<1.7	Nov 2020	No
NEtFOSAA (ng/L)	1.7	<1.7	Nov 2020	No
NMeFOSAA (ng/L)	1.7	<1.7	Nov 2020	No
Perfluoroundecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
Perfluorododecanoic acid (ng/L)	1.7	<1.7	Nov 2020	No
HFPODA (ng/L)	1.7	<1.7	Nov 2020	No
9Cl-PF3ONS (ng/L)	1.7	<1.7	Nov 2020	No
11Cl-PF3OUdS (ng/L)	1.7	<1.7	Nov 2020	No
DONA (ng/L)	1.7	<1.7	Nov 2020	No

Water Quality Data Table

Table 2a, 2b, 3a and 3b below list all of the drinking water contaminants and relevant sampling data collected during the 2020 calendar year (unless otherwise noted). NSF Deveselu samples for many more chemicals than are found in this table; only those contaminants detected in the water are presented. All contaminants detected in NSF Deveselu's drinking water are below the respective MCLs allowed by applicable EPA and FGS requirements.

Table 2a. Site Activation Area

<u>Parameter</u>	<u>FGS MCL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
TTHM (total Trihalomethanes) (ppm)	0.080	0.043	Mar 2020	No	By-product of drinking water disinfection.
TTHM (total Trihalomethanes) (ppm)	0.080	0.0104	Aug 2020	No	By-product of drinking water disinfection.
Aluminum (ppm)	0.2	0.033	Mar 2020	No	Erosion of natural deposit
Boron (ppm)	1	0.10	Mar 2020	No	Erosion of natural deposits
Iron (ppm)	0.2	0.049	Mar 2020	No	Erosion of natural deposit
Total Hardness (ppm)	89.25	86.8	Mar 2020	No	Erosion of natural deposit
Manganese (ppm)	0.05	0.018	Mar 2020	No	Erosion of natural deposit
Sulfate (ppm)	250	13.9	Mar 2020	No	Erosion of natural deposit
Zinc (ppm)	5	0.036	Mar 2020	No	Erosion of natural deposit
Dalapon (ppm)	0.2	0.00054	Nov 2020	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposit

Table 2b. Site Activation Area Cu and Pb

<u>Parameter</u>	<u>FGS AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Samples Exceeding</u>	<u>Violation</u>	<u>Typical Source</u>
Copper – action level at consumer taps (ppm)	1.3	0.406	Jun 2020	0	No	Corrosion of household plumbing systems.
Copper – action level at consumer taps (ppm)	1.3	0.0951	Dec 2020	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0023	Jun 2020	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0024	Dec 2020	0	No	Corrosion of household plumbing systems.

Table 3a. Main Base Results

<u>Parameter</u>	<u>FGS MCL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
TTHM (total Trihalomethanes) (ppm)	0.080	0.0435	Mar 2020	No	By-product of drinking water disinfection.
TTHM (total Trihalomethanes) (ppm)	0.080	0.0788	Aug 2020	No	By-product of drinking water disinfection
Aluminum (ppm)	0.2	0.024	Mar 2020	No	Erosion of natural deposit
Boron (ppm)	1	0.21	Mar 2020	No	Erosion of natural deposits
Iron (ppm)	0.2	0.083	Mar 2020	No	Erosion of natural deposits
Total Hardness (ppm)	89.25	67.5	Mar 2020	No	Erosion of natural deposits
Manganese (ppm)	0.05	0.021	Mar 2020	No	Erosion of natural deposits
Sulfate (ppm)	250	11.1	Mar 2020	No	Erosion of natural deposits

Zinc (ppm)	5	0.044	Mar 2020	No	Erosion of natural deposits
Dalapon (ppm)	0.2	0.00098	Aug 2020	No	Erosion of natural deposits
2-4 D (ppm)	0.07	0.00003	Aug 2020	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Dalapon (ppm)	0.2	0.00054	Nov 2020	No	Erosion of natural deposits
HAA5 (ppm)	0.06	0.023	Aug 2020	No	By-product of drinking water disinfection

Table 3b. Main Base Cu and Pb

<u>Parameter</u>	<u>FGS AL</u>	<u>Your Water</u>	<u>Sample Date</u>	<u>Samples Exceeding</u>	<u>Violation</u>	<u>Typical Source</u>
Copper – action level at consumer taps (ppm)	1.3	1.12	Jun 2020	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0024	Jun 2020	0	No	Corrosion of household plumbing systems.
Copper – action level at consumer taps (ppm)	1.3	1.24	Dec 2020	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0033	Dec 2020	0	No	Corrosion of household plumbing systems.

<u>Term</u>	<u>Definition</u>
ppm	parts per million, or milligrams per liter (mg/L)
ppb	parts per billion, or micrograms per liter (µg/L)
NA	Not Applicable

Important Drinking Water Definitions

<u>Term</u>	<u>Definition</u>
AL	Action Level: 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.

VIOLATIONS, EXCEEDANCES, or MISSED SAMPLING EVENTS:

NSF Deveselu had no exceedances of the AL or MCL in the 2020 calendar year.

Points of Contact

For more information, please contact the Public Works Environmental Office, which is a member of the Installation Water Quality Board, at DSN 324-770-0069.