NSF DEVESELU
2017 DRINKING WATER
CONSUMER CONFIDENCE REPORT

Is our water safe to drink?

Yes. NSF Deveselu drinking water provides water that is safe and Fit For Human Consumption (potable) as determined by the Installation Commanding Officer's Record of Decision dated October 15, 2014 for the Site Activation Area (SAA) and March 04, 2016 for the Main Base.

Our drinking water fully complies with the Overseas Environmental Baseline Guidance Document (OEBGD) and the Navy CNICINST 5090.1A. 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. In this reporting year there was one exceedance of a contaminant which will be explained below.

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

NSF Deveselu provides treated groundwater supplied by three deep wells, one for the SAA and two for the Main Base. Source water is treated near the well head by disinfection using sodium hypochlorite (aka chlorine) prior to distribution.

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 Environmental Protection Agency (EPA) Drinking Water Standards web site: http://permanent.access.gpo.gov/lps21800/www.epa.gov/safewater/standards.html.

Source water assessment

A comprehensive sanitary survey of the NSF Deveselu drinking water system was conducted in October 2016 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 sanitary survey report.

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 USEPA'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 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/safewater/lead .

Water Quality Data Table

The table below lists all of the drinking water contaminants and relevant sampling data collected during the 2017 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, except copper (as noted below) are below the Maximum

Contaminant Levels (MCLs) allowed by applicable EPA and OEBGD requirements

Table 1. Site Activation Area

Parameter	OEBGD MCL	Concentration	Sample Date	Violation	Typical Source
TTHM (total Trihalomethanes) (ppm)	0.080	0.021	Nov 2017	No	By-product of drinking water disinfection.
Arsenic (ppm)	0.010	0.0091	Nov 2017	No	Erosion of natural deposits
Barium (ppm)	2.0	0.12	Nov 2017	No	Erosion of natural deposits
Chromium (ppm)	0.1	0.004	Nov 2017	No	Erosion of natural deposits
Halo acetic acids {HAA5} (ppm)	0.0018	0.0198	Nov 2017	No	Erosion of natural deposits
Dichloromethane (ppm)	0.005	0.0065	Nov 2017	No	By-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
Sodium (ppm)	N/A	80	Nov 2017	No	Erosion of natural deposits, leaching
Nitrate/Nitrite (as Nitrogen) (ppm)	10	1.8	Nov 2017	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Parameter	OEBGD AL	90th percentile	Sample Date	Samples Exceeding	Violation	Typical Source
Copper – action level at consumer taps (ppm)	1.3	0.011	Jun 2017	0	No	Corrosion of household plumbing systems.
Copper – action level at consumer taps (ppm)	1.3	0.028	Nov 2017	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0017	Nov 2017	0	No	Corrosion of household plumbing systems.

Table 2. Main Base Results

Parameter	OEBGD MCL	Concentration	Sample Date	Violation	Typical Source
TTHM (total Trihalomethanes) (ppm)	0.080	0.033	Nov 2017	No	By-product of drinking water disinfection.
Nitrate/Nitrite (as Nitrogen) (ppm)	10	0.16	Nov 2017	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Parameter	OEBGD AL	90th percentile	Sample Date	Samples Exceeding	Violation	Typical Source
Copper – action level at consumer taps (ppm)	1.3	1.1	Jun 2017	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0012	Jun 2017	0	No	Corrosion of household plumbing systems.
Copper – action level at consumer taps (ppm)	1.3	1.4	Nov 2017	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0019	Nov 2017	0	No	Corrosion of household plumbing systems.

3. RO HUTS Area Results

Parameter	OEBGD MCL	Concentration	Sample Date[1]	Violation	Typical Source
TTHM (total Trihalomethanes) (ppm)	0.080	0.000571	Nov 2017	No	By-product of drinking water disinfection.

Parameter	OEBGD AL	90th percentile	Sample Date[1]	Samples Exceeding	Violation	Typical Source
Copper – action level at consumer taps (ppm)	1.3	0.037	Jun 2017	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0055	Jun 2017	0	No	Corrosion of household plumbing systems.
Copper – action level at consumer taps (ppm)	1.3	0.021	Nov 2017	0	No	Corrosion of household plumbing systems.
Lead - action level at consumer taps (ppm)	0.015	0.0031	Nov 2017	0	No	Corrosion of household plumbing systems.

[1] [1] Testing at the RO HUTS AREA stopped at May 31 because the water was shut down

Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
NA	NA: not applicable

Important Drinking Water Definitions	
Term	**Definition**
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water
MCLG	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

MPL	MPL: State Assigned Maximum Permissible Level
MRDL	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	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
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions	Variances and Exemptions: EPA permission not to meet an MCL or a treatment technique under certain conditions.

VIOLATIONS, EXCEEDANCES, or MISSED SAMPLING EVENTS:

NSF Deveselu had one exceedance of the AL for copper reported in November 2017. The sites where copper exceeded the AL were secured to prevent use while Public Notification was issued, and then re-sampled immediately. Results were received back below the AL. Exceedance of the copper AL does not mean there will be adverse health effects; however, an exceedance does mean the installation must take additional actions. Copper is regulated by a treatment technique that requires water systems to control the reactivity of the water. Water at NSF Deveselu is moderately corrosive to copper pipes; this will be corrected with a new reverse osmosis (RO) treatment system upgrade being designed and planned for construction in 2019.

Points of Contact

For more information, please contact the Installation Environmental Program Director at Public Works Office who is member of the Installation Water Quality Board

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