



# NSF DEVESELU 2015 DRINKING WATER CONSUMER CONFIDENCE REPORT



## About this Report

This Consumer Confidence Report (CCR) is prepared in accordance with the Overseas Environmental Baseline Guidance Document, CNIC Instructions 5090.1 and 5090.3, and COMNAVREGEUR Instruction 11330.1. This CCR provides valuable information on water quality and supports the Navy's commitment to provide high quality drinking water to our service members, their families, local installation staff, and other DoD personnel. Presented in this report is information regarding the source of our water, its constituents and the health risks associated with any contaminants detected in quantities exceeding a drinking water regulatory maximum contaminant level (MCL) or an action level (AL) during the calendar year 2015.

## Is our water safe to drink?

NSF Deveselu's drinking water system provides water that is safe and Fit For Human Consumption (potable) as determined by the Installation Commanding Officer's Record of Decision dated September 09, 2014 for the Navy side of the Support Area (S.A.), October 18, 2014 for the Missile Defense Agency (MDA) side of the S.A. and March 04, 2016 for the Main Base.

Our drinking water fully complies with the Overseas Environmental Baseline Guidance Document (OEBGD). When Romanian and U.S. standards differ, the *most protective* requirement is adopted. 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 (No constituent exceeded the maximum contaminant levels.)

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

NSF Deveselu provides treated groundwater supplied by three deepwells, one for the S.A. and two for the Main Base. Source water is treated near the well head by disinfection with sodium hypochlorite prior to distribution. Additional information about the source water is available from the Public Works Environmental Office at 770-0069.

## 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 presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained from the Safe Drinking Water website, [www.epa.gov/safewater/sdwa](http://www.epa.gov/safewater/sdwa). 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, that are byproducts of chlorinating water that contains natural organics. Some people who drink trihalomethanes 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.

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. The OEBGD and CNICINST 5090.1 mandate that those limitations are met in our Overseas Drinking Water System. 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 the Public Works Environmental Office, who are members of the Installation Water Quality Board (IWQB). A Boil Water Notification or other Important Information about your Drinking Water service will be issued by the IWQB and will be posted at all affected buildings. 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 will be conducted in October 2016. The survey will provide an evaluation of the adequacy of the drinking water source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water. NAVFAC will continually improve the drinking water system based on report recommendations. A Certificate to Operate will be provided to the Installation Commanding Officer upon completion of report recommendations.

### Do I need to use special precautions?

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. Some people who drink trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

USEPA/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 Safe Water

Drinking website, [www.epa.gov/safewater/sdwa](http://www.epa.gov/safewater/sdwa).

### 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](http://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 2015 calendar year (unless otherwise noted<sup>1</sup>). The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. All contaminants detected in NSF Deveselu’s drinking water are below allowed levels and meet EPA and OEBGD requirements.

Table 1. Support Area Results

<u>Parameter</u>	<u>units</u>	<u>OEBGD MCL</u>	<u>Concen- tration</u>	<u>Testing Frequency</u>	<u>Violation</u>	<u>Typical Source</u>
TTHMs (total trihalomethanes) (ppm)	ppb	0.080	0.022	Quarterly	No	By-product of drinking water disinfection.
Arsenic	ppm	0.010	0.005	Annually	No	Erosion of natural deposits.
Barium	ppm	2.0	0.085	Annually	No	Erosion of natural deposits.
Chromium	ppm	0.1	0.005	Annually	No	Erosion of natural deposits.
Nickel	ppm	0.1	0.015	Annually	No	Erosion of natural deposits.
Dichloromethane	ppb	0.005	5.0	Quarterly	No	By-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems
1,2 Dichloroethane	ppb	0.005	0.88	Quarterly	No	
1,1,1 Trichloroethane	ppb	0.2	0.33	Quarterly	No	
Tetrachloroethane	ppb	0.005	1.36	Quarterly	No	
Vinyl Chloride	ppb	0.002	1.0	Quarterly	No	
Sodium	ppm	NA	97.7	Annually	No	Erosion of natural deposits, leaching.
Fluoride	ppm	4.0	0.199	Annually	No	Erosion of natural deposits, leaching.

Total Nitrate/Nitrite (as Nitrogen)	ppm	10	1.72	Quarterly	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
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<u>Parameter</u>	<u>OEBGD AL</u>	<u>units</u>	<u>90<sup>th</sup> percentile</u>	<u>Sample Date<sup>1</sup></u>	<u>Samples Exceeding AL</u>	<u>Violation</u>	<u>Typical Source</u>
Copper – action level at consumer taps	1.3	ppm	.0351	Sept 2015	0	No	Corrosion of household plumbing systems.
Lead – action level at consumer taps	0.015	ppm	.0007	Sept 2015	0	No	Corrosion of household plumbing systems.

Table 2. Main Base Results

<u>Parameter</u>	<u>units</u>	<u>OEBGD MCL</u>	<u>Concentration</u>	<u>Testing Frequency<sup>1</sup></u>	<u>Violation</u>	<u>Typical Source</u>
TTHMs (total trihalomethanes)	ppm	0.04	0.00869	Quarterly	No	By-product of drinking water disinfection.
HAA5 (haloacetic acids)	ppm	0.03	0.0198	Annually	No	By-product of drinking water disinfection.
Arsenic	ppm	0.01	0.007	Annually	No	Erosion of natural deposits.
Barium	ppm	2.0	0.09	Annually	No	Erosion of natural deposits.
Dalapon	ppm	0.002	0.004	Quarterly	No	By-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems
Sodium	ppm	NA	140	Annually	No	Erosion of natural deposits, leaching.
Fluoride	ppm	4.0	0.1	Annually	No	Erosion of natural deposits, leaching.
Total Nitrate Nitrogen	ppm	10	1.4	Quarterly	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

<sup>1</sup> Testing at the Main Base formally began in September 2015 so these results represent a single quarter.

<u>Parameter</u>	<u>OEBGD AL</u>	<u>units</u>	<u>90<sup>th</sup> percentile</u>	<u>Sample Date<sup>1</sup></u>	<u>Samples Exceeding AL</u>	<u>Violation</u>	<u>Typical Source</u>
Copper – action level at consumer taps	1.3	ppm	1.2	Dec 2015	0	No	Corrosion of household plumbing systems.
Lead – action level at consumer taps	0.015	ppm	0.0024	Dec 2015	0	No	Corrosion of household plumbing systems.

<u>Term</u>	<u>Definition</u>
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

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
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.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.
Variances and Exemptions	Variances and Exemptions: EPA permission not to meet an MCL or a treatment technique under certain conditions.
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.

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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

### **VIOLATIONS, EXCEEDANCES, or MISSED SAMPLING EVENTS:**

NSF Deveselu experienced no violations, exceedances, or missed sampling events during the 2015 Calendar Year.

### **Points of Contact**

This Consumer Confidence Report is required by COMNAVREGEUR Instruction 11330.1 (30 July 2007) and CNIC Instruction 5090.1 (04 FEB 2013)

For more information, please contact the Public Works Environmental Office, who are members of the Installation Water Quality Board.

Installation Environmental Program Director, Julie Shane DSN 314-266-1207, Cell +30 694 043 1276, e-mail [julie.shane@eu.navy.mil](mailto:julie.shane@eu.navy.mil).

Environmental Technician, Buse Florentin, [florentin.buse@b3globalcon.eu](mailto:florentin.buse@b3globalcon.eu) DSN 324-770-0069.