U.S. NAVAL SUPPORT ACTIVITY NAPLES
SATCOM LAGO PATRIA

2014 DRINKING WATER
CONSUMER CONFIDENCE REPORT

Is our water safe to drink?

Naval Support Activity (NSA) Naples SATCOM Lago Patria (SATCOM) 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 27 February 2014. 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 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 DoD's Final Governing Standards (FGS), which are derived from the U.S. DoD Overseas Environmental Baseline Guidance Document (OEBGD), U.S. Environmental Protection Agency (EPA) and Italy's drinking water standards. When Italy and U.S. standards differ, the *most protective* requirement is 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.

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

SATCOM is provided drinking water by the Town of Giugliano, which purchases water from the West Campania Aqueduct. The West Campania Aqueduct collects ground and surface water from springs and wells in the Cassino area northwest of Naples and provides initial disinfection using chlorine dioxide. Naval Facilities Engineering Command (NAVFAC) Naples Public Works Department further treats the water and adds chlorine 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**, 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, 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: http://permanent.access.gpo.gov/lps21800/www.epa.gov/safewater/standards.html

Source water assessment

In July 2014 the Naval Facilities Engineering Command (NAVFAC) conducted a comprehensive sanitary survey of the SATCOM 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. NAVFAC is continually improving the drinking water system based on the recommendations contained in the 2014 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

Additional information for bromate and trihalomethanes

If present, elevated levels of bromate can cause serious health problems. Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer. Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Information on Bromate and Trihalomethanes in drinking water and the steps you can take to minimize exposure is available from the USEPA Safe Drinking Water website,
http://water.epa.gov/drink/contaminants/basicinformation/disinfectionbyproducts.cfm

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. 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 USEPA Safe Drinking Water webpage www.epa.gov/safewater/sdwa

Water Quality Data Table

The table below lists all of the drinking water contaminants and relevant sampling data collected during the 2014 calendar year (unless otherwise noted). 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.

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*	0.58	0.32	0.58	2014	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	800	800	800*	250	30	250	2014	No	Water additive used to control microbes
Bromate (ppb)	0	10	10	2.17	NA		2014	No	By-product of drinking water disinfection.
Haloacetic Acids (ppb)	NA	60	60*	2.0	NA		2014	No	By-product of drinking water disinfection.
TTHMs [Total Trihalomethanes] (ppb)	NA	80	30	22	NA		2014	No	By-product of drinking water disinfection
* MCL from Overseas Environmental Baseline Guidance Document (OEBGD)									
Inorganic Contaminants									
Barium (ppm)	2	2	2	0.010	NA		2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Boron (ppm)	NA		1	0.060	NA		2014	No	Discharge from domestic washing agents; Erosion of natural deposits
Chlorides (ppm)	NA		250	140	NA		2014	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			
Iron (ppb)	NA		200	45	NA		2014	No	Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	10	0.80	0.50	0.80	2014	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	NA		200	159	93	215	2014	No	Erosion of natural deposits; Leaching
Sulfate (ppm)	NA		250	2.9	NA		2014	No	Discharge from mines and smelters and from kraft pulp and paper/textile mills and tanneries
Vanadium (ppm)	NA		1	0.002	NA		2014	No	Erosion of natural deposits
Turbidity (NTU)	NA		1	0.488	0.075	0.488	2014	No	Soil run off
Radioactive Contaminants (Tested every 4 years)									
Alpha emitters (pCi/L)	0	15	15	1	0.77	1	2012	No	Erosion of natural deposits
Beta/photon emitters (pCi/L)	0	50	50	1.6	0.17	1.6	2012	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Radium [Combined 226/228] (pCi/L)	0	5	5	0.45	0.35	0.45	2012	No	Erosion of natural deposits

Unit Descriptions	
Term	**Definition**
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
NR	NR: Monitoring not required, but recommended.
PQL	Practical Quantitation Limit of the best method

Important Drinking Water Definitions	
Term	**Definition**
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. MCLs are set as close to the MCLGs as feasible using the best available treatment
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
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Points of Contact

If you have any questions regarding this report or about the drinking water 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 629-6299 or commercial 081-811-6299.