U.S. NAVAL SUPPORT ACTIVITY NAPLES
GAETA OLDE MILL INN

2015 DRINKING WATER
CONSUMER CONFIDENCE REPORT

Is our water safe to drink?

Gaeta Olde Mill Inn's drinking water system receives treated water directly from Acqua Latina, the water purveyor for the City of Gaeta, with no additional treatment from the U.S. Navy. Due to the consistent nature of elevated turbidity and lack of disinfectant in the Gaeta drinking water supply, on 20 September 2013 the NSA Naples Commanding Officer (CO) issued a Drinking Water Advisory that declared the water at the Olde Mill Inn (OMI) non-potable/"Not Fit For Human Consumption".

On 16 January 2014, the NSA Naples CO issued a Record of Decision for Water Quality determining that the water provided by Acqua Latina, to the OMI recreational area is "Not Fit for Human Consumption." The water provided to Naval Support Activity Naples Detachment (NSAND) Gaeta Fleet Landing was also listed as "Not Fit for Human Consumption." Bottled water has been regularly provided to U.S. Navy personnel at these facilities following non potability advisories. Based on historical practice and in concert with the standard applied throughout the Naples area as recommended in the Naples Public Health Evaluation, a "Limited Use" determination for municipal water has been applied and personnel have been authorized to use it for external sanitary uses such as showering, bathing and hand washing.

This annual Consumer Confidence Report includes general and mandatory information to educate everyone about our water sources, treatment processes and standard requirements.
Except for Turbidity and Chlorine Residual (see "Additional Information for Turbidity and Chlorine Residual" below), 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.

Additional information for Turbidity and Chlorine residual

The City of Gaeta water system, supplied by Acqua Latina, has historically been subject to high levels of Turbidity (water cloudiness) and low levels of chlorine residuals (disinfectant).

Turbidity has no health effects. However, turbidity can interfere with the water disinfection which may provide a medium for microbial growth in the water. Therefore, Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. If you experience any of these symptoms and they persist, you may want to contact your health care provider.

Currently, "Non-Potability" signage is posted next to each faucet and a "bottled water advisory" exists for NSAND Gaeta and OMI Gaeta personnel to reduce the health risk associated with ingestion such as drinking, cooking, and maintaining oral hygiene. This advisory will continue until the turbidity and potential microbial concerns of the drinking water supply are adequately addressed. In order to do so, NSA Naples has completed the construction of a Water Treatment Plant (WTP) at OMI. This WTP will reduce turbidity levels below U.S. Safe Drinking Water Act and

FGS limits and address the potential microbial concerns. Operational testing of the WTP equipment and the start-up water quality monitoring activities are expected to be completed by 30 July 2016.

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

OMI and NSAND Gaeta purchase treated water from Acqua Latina. Acqua Latina receives its water from two sources: the Capodacqua wells and the Mazzoccolo springs. Water is disinfected at both locations using Ultraviolet (UV) light and sodium hypochlorite (a form of chlorine) disinfection. Water is stored in several reservoirs before it is pumped to the City of Gaeta. To monitor the quality of water delivered to its customers, Acqua Latina routinely collects and analyzes water samples at several points along its aqueduct every week. Samples are split and also submitted to the local health department for testing.

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 OMI 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

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 Trihalomethanes in drinking water and the steps you can take to minimize exposure is available from the USEPA Safe Drinking Water website, https://www.epa.gov/ground-water-and-drinking-water/table-regulated-drinking-water-contaminants

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. Italian Navy personnel and NAVFAC Public Works personnel provide oversight on drinking water quality at NSAND Gaeta and OMI respectively and have 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 webpage www.epa.gov/safewater/sdwa

Water Quality Data Table

During 2015, more than 500 tests were performed for over 130 contaminants. Unless otherwise noted, the table below only lists the contaminants that were detected during calendar year 2015. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. All contaminants detected in OMI and NSAND Gaeta'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[1]	0.64[2]	0.244	0.64	2015	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	800	800	800[1]	220[2]	30	220	2015	No	Water additive used to control microbes
Inorganic Contaminants									
Chlorides (ppm)	NA		250	8.4	NA		2015	No	Erosion of natural deposits
Iron (ppb)	NA		200	8	NA		2014	No	Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	10	0.50	0.3	0.5	2015	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (ppm)	NA		200	4.4	NA		2015	No	Erosion of natural deposits; Leaching
Sulfate (ppm)	NA		250	3.8	NA		2015	No	Discharge from mines and smelters and from kraft pulp and paper/textile mills and tanneries
Vanadium (ppm)	NA		1	0.001	NA		2014	No	Erosion of natural deposits
Microbiological Contaminants									
Turbidity (NTU)[2]	0	1	1	0.65	0.19	0.65	2015	No	Soil run off
Radioactive Contaminants (Tested every 4 years)									
Alpha emitters (pCi/L)	0	15	15	0.63	0.48	0.63	2012	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			
Beta/photon emitters (pCi/L)	0	50	50	0.49	0.013	0.49	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	0.29	0.13	0.29	2012	No	Erosion of natural deposits

NOTES:
[1] MCL from Overseas Environmental Baseline Guidance Document (OEBGD)
[2] Samples collected in the drinking water distribution system

Inorganic Contaminants at Consumer Taps

Contaminants	MCLG	AL	Your Water	Sample Year	# Samples Exceeding AL	Exceeds AL	Typical Source
Copper [Action level at consumer taps] (ppm)	1.3	1.3	0.067	2013	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead – [Action level at consumer taps] (ppb)	0	15	4.7	2013	0	No	

Unit Descriptions	
Term	**Definition**
ppm	parts per million, or milligrams per liter (mg/L)
ppb	parts per billion, or micrograms per liter (µg/L)
pCi/L	picocuries per liter (a measure of radioactivity)
NA	not applicable
ND	Not detected
NR	Monitoring not required, but recommended.
PQL	Practical Quantitation Limit of the best method
Important Drinking Water Definitions	
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	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.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.

Variances and Exemptions	EPA permission not to meet an MCL or a treatment technique under certain conditions.
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	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	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level

TT Violations	Explanation	Length	Steps Taken to Correct the Violation	Health Effects Language
Surface water treatment rule filtration and disinfection violations	Olde Mill Inn's (OMI) drinking water system receives treated water directly from Acqua Latina, the water purveyor for the City of Gaeta, with no additional treatment from the U.S. Navy. Due to the consistent nature of elevated turbidity and lack of disinfectant in the Gaeta drinking water supply, on 20 September 2013 the NSA Naples Commanding Officer (CO) issued a Drinking Water Advisory that declared the water at OMI and Naval Support Activity Naples Detachment (NSAND) Gaeta non-potable/not fit for human consumption.	A bottled water advisory is in place and will continue until the potential microbial concerns of the drinking water supply are adequately addressed. In order to do so, NAVFAC Naples Public Works Department has completed the construction of a Water Treatment Plant (WTP) at OMI. Operational testing of the Plant equipment and the start-up water quality monitoring activities are expected to be completed by 30 July 2016	Bottled water is provided to U.S. Navy personnel at NSAND Gaeta and OMI. Personnel have been authorized to use municipal water for external sanitary uses such as showering, bathing and hand washing. Once the new OMI Water Treatment Plant will be operational and water quality monitoring will confirm the produced water is in compliance with applicable regulatory requirements, the water will be declared Fit For Human Consumption	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

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.