



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

What is a Drinking Water Consumer Confidence Report?

A Drinking Water Consumer Confidence Report (CCR), also known as Annual Water Quality Report or Drinking Water Quality Report, summarizes information regarding water sources used (i.e., rivers, lakes, reservoirs, or aquifers), any detected contaminants, compliance and educational information. This CCR provides all test results for contaminants detected from January 1 through December 31, 2013 and includes information on how they compare to the standards set by regulatory agencies. This CCR is prepared in accordance with CNIC Instructions 5090.3, and COMNAVREGEUR Instruction 11330.1, provides valuable water quality information and reflects the Navy's commitment to providing safe drinking water to service members and their families.

Is my water safe?

The drinking water system at the Naval Support Activity Naples Detachment (NSAND) Gaeta - Olde Mill Inn is monitored in accordance with standards and requirements prescribed by the Department of Defense's (DoD's) Environmental Final Governing Standards (FGS) for Italy. FGS were developed by comparing and adopting the more protective drinking water requirements of either the U.S. DoD Overseas Environmental Baseline Guidance Document (OEBGD) or the Italian drinking water regulations. For additional information on regulatory requirements, see the section describing "What standards apply to drinking water at overseas DoD installations?" on page 5 of this CCR.

During 2013, water from the NSAND Gaeta – Olde Mill Inn water system was subjected to more than 290 tests for over 139 contaminants. As a result, 9 regulated contaminants were detected, however, their concentration and all other tests results were below the maximum contaminant levels (MCLs) allowed by the FGS except for Turbidity and Chlorine Residual (Read "Additional Information for Turbidity and Chlorine Residual" below).

Additionally, no less than eight water samples per month were randomly collected throughout the water system during 2013 and analyzed for microbiological contaminants, including coliform bacteria. Following a review of test results, to include turbidity measurements and the U.S. Naval Hospital Naples (USNH) Preventive Medicine Authority (PMA) recommendation, in September 2013 the Commanding Officer of NSA Naples has declared the water delivered by the water distribution system onboard NSAND Gaeta as Non-Potable and NOT fit for domestic use and consumption.

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). The high Turbidity levels often result in the City of Gaeta declaring the water non-potable. When Turbidity levels rise above the maximum levels allowed in the water distribution system, the Mayors of the Cities of Gaeta and Formia declare the water non-potable. When this occurs, the office of the Mayor of Gaeta notifies the NSAND Gaeta Protocol Officer who initiates a specific procedure to notify all Military members and their families living in the Gaeta area. As part of this notification procedure, non-potable warning signs are posted at every faucet within the NSAND Gaeta – Olde Mill Inn premises.



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

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.

Starting in late October 2012, following multiple heavy rain events, extremely high turbidity excursions and prolonged periods of excessive turbidity were observed during the October 2012 to March 2013 timeframe. In addition, positive coliform and positive Escherichia coli (E. coli) bacteriological results were documented multiple times during this period resulting in the issuance of a Gaeta-wide 'Bottled Water Advisory' in October 2012 by the Installation Commanding Officer (ICO) of NSA Naples. The 'Bottled Water Advisory' remains in effect today and makes the recommendation that "NSAND Gaeta personnel working and living in the Gaeta area continue use of bottled water for drinking, food preparation, cooking, brushing teeth, making ice, and for pets."

The NSA Naples ICO subsequently issued a Drinking Water Advisory that declared the drinking water at NSAND Gaeta and OMI Gaeta non-potable/not fit for human consumption on 20 September 2013. Since September 2013, three Drinking Water Advisories have been issued for NSAND Gaeta, one each in September 2013, October 2013, and November 2013. Due to the consistent nature of elevated turbidity and lack of disinfectant in the drinking water supply, no change or update to the November 2013 Drinking Water Advisory has been made.

Currently, 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. We believe that this advisory will continue indefinitely or until such time the microbial concerns of the drinking water supply are adequately addressed.

NSAND Gaeta and OMI Gaeta drinking water systems continue to be "Not Fit for Human Consumption." Bottled water is provided to U.S. Navy personnel and "Non-Potability" signage is posted next to each faucet at these facilities. Personnel have been authorized to use municipal water for external sanitary uses such as showering, bathing, and hand washing.

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

NSAND Gaeta purchases treated water from Acqua Latina. Water is received 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.



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

The following Commands/Departments are responsible to ensure delivery of safe drinking water to NSAND Gaeta. Some of the Commands/Departments are also standing members of the Installation Water Quality Board (IWQB). Listed below are their responsibilities:

Italian Navy Personnel:

- Conduct drinking water distribution system operation and maintenance including cleaning of tanks and system disinfection.

NAVFAC Naples Public Works Department: (IWQB Standing Member)

- backflow prevention

NAVFAC Naples Public Works Department Environmental Division: (IWQB Standing Member)

- Ensure compliance with FGS.
- Coordinate drinking water sampling and laboratory analysis.
- Recordkeeping.

U.S. Naval Hospital Naples (Preventive Medicine Authority): (IWQB Standing Member)

- Certifies base drinking water systems as potable.
- Conducts medical surveillance of the drinking water supply to include bacteriological and disinfectant residual monitoring.
- Provide health effects advice and implementation of protective measures associated with any instances of non-compliance.

NAVFAC:

- Treatment plant construction/upgrades.
- Maintain source water surveys, master plans, sanitary surveys, and laboratory contract services.

NSA Naples Public Affairs Office: (IWQB Standing Member)

- Initiate public notification for non-compliance issues associated with on-base drinking water systems. Public notification covers potential adverse health effects/risks, corrective actions, alternative water supplies and protective measures.
- Initiate public notification for non-compliance issues associated with off-base systems in the surrounding community which may affect station personnel.
- Publish CCRs.
- Provide Community Outreach.

NSA Naples Housing Office:

- Coordinate drinking water issues related to base housing.



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

Source water assessment

In December 2007 and in April 2008, United States Navy contractor AH Environmental Consultants conducted a comprehensive sanitary survey of all of NSA Naples' installations. This survey evaluated adequacy of the drinking water source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

Why are there contaminants in my drinking water?

It is reasonable to expect drinking water, including bottled water, to contain at least small amounts of some contaminants. Drinking water sources (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 can pick up substances resulting from the presence of animals or from human activity. Substances that may be picked up by source drinking water include:

- **Microbial contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- **Inorganic contaminants**, 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;
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- **Organic chemical contaminants** include synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm water runoff and septic systems; and
- **Radioactive contaminants**, which can be naturally occurring and form part of the Earth's crust. Can also be present due to 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. More information about contaminants and potential health effects can be obtained by calling the **Environmental Protection Agency's (EPA) Safe Drinking Water Hotline**: (800-426-4791) or on line at <http://water.epa.gov/drink/info/index.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. Italian Navy personnel provide oversight on drinking water quality at NSAND Gaeta 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. If you are concerned about lead in your water, you may wish to have your water tested. 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 <http://water.epa.gov/drink/info/lead/index.cfm>



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

What standards apply to drinking water at overseas DoD installations?

DoD potable water systems in Europe must comply with the requirements contained in the FGS Drinking Water chapter. These requirements are developed by Commander Navy Region Europe, Africa, Southwest Asia (CNREURAFSWA) through a comprehensive review and comparison of drinking water related requirements contained in the U.S. DoD Overseas Environmental Baseline Guidance Document (OEBGD) and in the Host Nations drinking water national, regional and local laws and regulations. When the Host Nation and OEBGD standards are different, the **more protective** requirement is adopted. Once finalized, and approved by Headquarters, United States European Command (EUCOM), the FGS is then issued by CNREURAFSWA. Regularly monitored parameters listed in the Drinking Water chapter of the FGS for Italy include:

- **Bacteriological:** Total Coliforms
- **Inorganics:** Asbestos, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cyanide, Fluoride, Mercury, Nickel, Selenium, Sodium, Thallium, Nitrate, Nitrite, Total Nitrate/Nitrite, Lead and Copper
- **Organic Compounds:** Benzene, Carbon tetrachloride, o-Dichlorobenzene, cis-1,2-Dichloroethylene, trans-1,2-Dichloroethylene, 1,1-Dichloroethylene, 1,1,1 - Trichloroethane 1,2-Dichloroethane, Dichloromethane, 1,1,2-Trichloroethane, 1,2,4-Trichloro-benzene, 1,2-Dichloropropane, Ethylbenzene, Monochlorobenzene, para-Dichlorobenzene, Styrene, Tetrachloroethylene, Trichloroethylene, Toluene, Vinyl chloride, Xylene
- **Pesticides and PCB's:** Alachlor, Aldicarb, Aldicarb sulfone, Aldicarb sulfoxide, Atrazine, Benzo[a]pyrene, Carbofuran, Chlordane, Dalapon, 2,4-D 1,2-Dibromo-3-chloropropane (DBCP), Di (2-ethylhexyl) adipate, Di (2-ethylhexyl) phthalate, Dinoseb, Diquat, Endrin, Endothall, Ethylene dibromide (EDB) (1,2-Dibromoethane), Glyphosphate, Heptachlor, Heptachlorepoxyde, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl (Vydate), PCBs (as decachlorobiphenyls), Pentachlorophenol, Picloram, Simazine, 2,3,7,8-TCDD (Dioxin), Toxaphene, 2,4,5-TP (Silvex)
- **Total Trihalomethanes:** Chloroform, bromoform, dibromochloromethane and bromodichloromethane
- **Radionuclides:** Gross alpha activity and combined radium-226 and -228

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as cancer patients 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 guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available on EPA's Drinking Water Consumer Information web page at

<http://water.epa.gov/drink/info/index.cfm>



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public sewer system.
- Dispose of chemicals properly.



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

Water Quality Data Table

The table below lists the highest level and range, if available, of drinking water contaminants that were detected during calendar year 2013 and contaminants detected in previous years that are on a greater than one-year monitoring cycle. The presence of contaminants in water does not necessarily indicate that water poses a health risk. Unless otherwise noted, the data presented in this table is from testing conducted in the calendar year of the report. For more information please contact the U.S. Naval Hospital Naples Preventive Medicine Office at DSN 629-6299 or commercial 081-811-6299.

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)									
Bromate (ppb)	0	10	10	2.61	NA		2013	No	By-product of drinking water disinfection
Chlorine (as Cl ₂) (ppm)	4	4	4 *	0.14	ND	0.14	2013	No	Water additive used to control microbes
Chlorine Dioxide (ppb)	0.8	800	800*	50	ND	50	2013	No	Water additive used to control microbes
HAA5 (Haloacetic Acids) (ppb)	NA	60	60*	1	NA		2013	No	By-product of drinking water disinfection
* MCL from Overseas Environmental Baseline Guidance Document (OEBGD)									
Inorganic Contaminants									
Chlorides (ppm)	NA		250	8.2	NA		2013	No	Erosion of natural deposits
Nitrate [Measured as Nitrogen] (ppm)	10	10	10	0.4	0.3	0.4	2013	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

Contaminants	MCLG or MRDLG	EPA MCL, TT, or MRDL	FGS MCL	Your Water	Range		Sample Year	Violation	Typical Source
					Low	High			
Sodium (ppm)	NA		200	4.5	NA		2013	No	Erosion of natural deposits; Leaching
Sulfate (ppm)	NA		250	3.8	NA		2013	No	Discharge from mines and smelters and from kraft pulp and paper/textile mills and tanneries
Turbidity (NTU)	NA	NA	1	1.23	0.33	1.23	2013	Yes	Soil runoff
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
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



**U.S. NAVAL SUPPORT ACTIVITY NAPLES
DETACHMENT GAETA - OLDE MILL INN
2013 DRINKING WATER CONSUMER CONFIDENCE
REPORT**

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)
ppt	ppt: parts per trillion, or nanograms per liter
ppq	ppq: parts per quadrillion, or picograms per liter
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.
positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
positive samples/yr	positive samples/yr: The number of positive samples taken per year
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.
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 technology.
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 that, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or 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 adding a disinfectant is necessary for control of microbial contaminants.
MNR	MNR (Monitored, Not Regulated)
MPL	MPL (State Assigned Maximum Permissible Level)