

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

## 2020 DRINKING WATER CONSUMER CONFIDENCE REPORT



#### Is our water safe to drink?

Yes. Gaeta Olde Mill Inn's (OMI) drinking water system provides water that is safe and "Fit For Human Consumption" (FFHC, or potable) as determined by the Naval Support Activity (NSA) Naples Installation Commanding Officer's Record of Decision dated 9 January 2017 and as routinely confirmed by laboratory sampling results (received monthly, quarterly, and yearly). The FFHC decision applies everywhere on OMI except Building 753 which, because of its isolated plumbing, remains NOT FFHC. This annual Consumer Confidence Report for calendar year 2020 includes general and mandatory information to educate everyone about our water sources, treatment processes and standard requirements, and other details to help assure you that our water is safe to drink.

Our drinking water fully complies with the Department of Defense's (DoD) Italy Environmental Final Governing Standards (FGS), which are derived from the U.S. DoD Overseas Environmental Baseline Guidance Document (OEBGD), the 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?

OMI purchases 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 the 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. The Navy BOS contractor for Gaeta further treats the water using filtration, UV light, and adds sodium hypochlorite as disinfectant to ensure that OMI'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**, 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: <a href="https://www.epa.gov/sdwa/drinking-water-contaminant-human-health-effects-information">https://www.epa.gov/sdwa/drinking-water-contaminant-human-health-effects-information</a>

#### Source water assessment

In May 2017, the Naval Facilities Engineering Command (NAVFAC) together with the Navy and Marine Corps Public Health Center conducted a comprehensive sanitary survey of the OMI drinking water system. 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. NAVFAC is continually improving the drinking water system based on the recommendations contained in the sanitary survey reports. Due to the impacts of the COVID-19 public health emergency, the 2020 Sanitary Survey will be conducted in 2021

### 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 following USEPA Safe Drinking Water webpage <a href="https://www.epa.gov/ground-water-and-drinking-water">https://www.epa.gov/ground-water-and-drinking-water</a>

#### 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 Public Works personnel provide oversight on drinking water quality at OMI 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. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing the tap for 30 seconds to 2 minutes before using water for drinking or cooking. Information on lead in drinking water and steps you can take to minimize exposure is available from the following USEPA Safe Drinking webpage www.epa.gov/safewater/lead

### Additional information for polyfluoroalkyl substances

## • What are per- and polyfluoroalkyl substances and where do they come from?

Per- and polyfluoroalkyl substances (PFAS) are a group of thousands of man-made chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the United States, since the 1940s. PFAS have been used to make coatings and products that are used as oil and water repellents for carpets, clothing, paper packaging for food, and cookware. They are also contained in some foams (aqueous film-forming foam or AFFF) used for fighting petroleum fires at airfields and in industrial fire suppression processes because they rapidly extinguish fires, saving lives and protecting property. PFAS chemicals are persistent in the environment and some are persistent in the human body – meaning they do not break down and they can accumulate over time.

## • Is there a regulation for PFAS in drinking water?

There is currently no established U.S. federal water quality regulation for any PFAS compounds. In May 2016, the EPA established a health advisory (HA) level at 70 parts per trillion (ppt) for individual or combined concentrations of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). Both chemicals are types of PFAS.

Out of an abundance of caution for your safety, the DoD PFAS testing and response actions go beyond the requirements included in the EPA Safe Drinking Water Act on the quality of water intended for human consumption. In 2020 the DoD promulgated a policy to monitor drinking water for PFAS at all service owned and operated water systems at a minimum of every three years.

The EPA's health advisory states that if water sampling results confirm that drinking water contains PFOA and PFOS at individual or combined concentrations greater than 70 parts per trillion, water systems should quickly undertake additional sampling to assess the level, scope, and localized source of contamination to inform next steps.

#### • Has Gaeta Olde Mill Inn tested its water for PFAS?

Yes. In November 2020, samples were collected from the Gaeta Olde Mill Inn's Water Treatment Plant. We are pleased to report that drinking water testing results were below the Method Reporting Limit (MRL) for all 18 PFAS compounds covered by the sampling method, including PFOA and PFOS. This means that PFAS were not detected in your water system. In accordance with DoD policy, the water system will be resampled every three years for your continued protection.

## Water Quality Data Table

During 2020, more than 300 tests were performed at Gaeta OMI for over 150 contaminants. Unless otherwise noted, Table 1 below only lists the contaminants that were detected during calendar year 2020. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. All contaminants detected in OMI's drinking water are below the Maximum Contaminant Levels (MCLs) allowed by FGS and EPA applicable requirements. Table 2 lists the 18 PFAS compounds that were tested in 2020. None of the 18 PFAS compounds, including PFOA and PFOS, were detected in the water system.

## Table 1: Water Quality Data

|                                                                                                                                                                          | MCLG        | EPA                       | <b>F6</b> 6 |                   | Range |      |                | Violation | Typical Source                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------|-------------|-------------------|-------|------|----------------|-----------|--------------------------------------------------------------------------------------------------------------------|
| Contaminants                                                                                                                                                             | or<br>MRDLG | MCL,<br>TT, or<br>MRDL    | FGS<br>MCL  | Your<br>Water Low |       | High | Sample<br>Year |           |                                                                                                                    |
| <b>Disinfectants &amp; Disinfection By-products</b><br>(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants) |             |                           |             |                   |       |      |                |           |                                                                                                                    |
| Chlorine (as Cl <sub>2</sub> )<br>(ppm)                                                                                                                                  | 4           | 4                         | 41          | 0.63 <b>2</b>     | 0.29  | 0.63 | 2020           | No        | Water additive<br>used to control<br>microbes                                                                      |
| Chlorine Dioxide<br>(ppb)                                                                                                                                                | 800         | 800                       | 8001        | 330 <b>2</b>      | 12    | 330  | 2020           | No        | Water additive<br>used to control<br>microbes                                                                      |
| Bromate (ppb)                                                                                                                                                            | 0           | 10                        | 10          | 3.02              | NA    |      | 2020           | No        | By-product of<br>drinking water<br>disinfection                                                                    |
| TTHMs [Total<br>Trihalomethanes]<br>(ppb)                                                                                                                                | NA          | 80                        | 30          | 12²               | NA    |      | 2020           | No        | By-product of<br>drinking water<br>disinfection                                                                    |
| Inorganic Contam                                                                                                                                                         | inants      | •                         |             |                   |       |      |                |           |                                                                                                                    |
| Aluminum (ppb)                                                                                                                                                           | NA          | 50 to<br>200 <sup>3</sup> | 200         | 17                | NA    |      | 2020           | No        | Discharge of<br>drilling<br>wastes;<br>Discharge<br>from metal<br>refineries;<br>Erosion of<br>natural<br>deposits |
| Barium (ppm)                                                                                                                                                             | 2           | 2                         | 2.0         | 0.024             | NA    |      | 2020           | No        | Discharge of<br>drilling<br>wastes;<br>Discharge<br>from metal<br>refineries;<br>Erosion of<br>natural<br>deposits |

|                                                 | MRDLG | EPA<br>MCL,<br>TT, or<br>MRDL | FGS<br>MCL | Your<br>Water | Range |      | Sample         |           |                                                                                                            |
|-------------------------------------------------|-------|-------------------------------|------------|---------------|-------|------|----------------|-----------|------------------------------------------------------------------------------------------------------------|
| Contaminants                                    |       |                               |            |               | Low   | High | Sample<br>Year | Violation | Typical Source                                                                                             |
| Chloride (ppm)                                  | NA    | 250 <sup>3</sup>              | 250        | 14            | N     | ۹.   | 2020           | No        | Runoff from<br>fertilizer use;<br>Leaching from<br>septic tanks,<br>sewage; Erosion of<br>natural deposits |
| Chromium (ppb)                                  | 100   |                               | 50         | 2.1           | NA    |      | 2020           | No        | Discharge from<br>steel and pulp<br>mills; Erosion of<br>natural deposits                                  |
| Nickel (ppb)                                    | NA    |                               | 20         | 1.2           | NA    |      | 2020           | No        | Leaching from<br>metals in contact<br>with drinking-<br>water, such as<br>pipes and fittings               |
| Nitrate [measured<br>as Nitrogen] (ppm)         | 10    |                               | 10         | 1.4           | 0.36  | 1.4  | 2020           | No        | Runoff from<br>fertilizer use;<br>Leaching from<br>septic tanks,<br>sewage; Erosion of<br>natural deposits |
| Sodium (ppm)                                    | NA    |                               | 200        | 9.8           | NA    |      | 2020           | No        | Erosion of natural deposits                                                                                |
| Sulfate (ppm)                                   | NA    |                               | 250        | 3.4           | NA    |      | 2020           | No        | Discharge from<br>mines and<br>smelters and from<br>kraft pulp and<br>paper/textile mills<br>and tanneries |
| Vanadium<br>(ppb)                               | NA    |                               | 140        | 1.1           | NA    |      | 2020           | No        | Erosion of natural deposits                                                                                |
| Radioactive Contaminants (Tested every 4 years) |       |                               |            |               |       |      |                |           |                                                                                                            |
| Radium<br>[Combined<br>226/228] (pCi/L)         | 0     | 5                             | 5          | 0.11          | 0.047 | 0.11 | 2020           | No        | Erosion of natural deposits                                                                                |
| Uranium (ug/L)                                  | 0     | 30                            | 30         | 1.0           | ND    | 1.0  | 2020           | No        | Erosion of natural deposits                                                                                |

<sup>2</sup> Samples collected in the drinking water distribution system
 <sup>3</sup> SMCL: EPA secondary MCL

| Inorganic Contaminants at Consumer Taps         |      |     |               |                                             |   |               |                                          |  |  |
|-------------------------------------------------|------|-----|---------------|---------------------------------------------|---|---------------|------------------------------------------|--|--|
| Contaminants                                    | MCLG | AL  | Your<br>Water | Sample<br>Year # Samples<br>Exceeding<br>AL |   | Exceeds<br>AL | Typical Source                           |  |  |
| Copper [Action level at consumer taps] (ppm)    | 1.3  | 1.3 | 0.094         | 2019                                        | 0 | No            | Corrosion of household plumbing systems; |  |  |
| Lead – [Action level at<br>consumer taps] (ppb) | 0    | 15  | 2.5           | 2019                                        | 0 | No            | Erosion of natural<br>deposits           |  |  |

# Table 2: PFAS Compounds

| Polyfluoroalkyl Compounds (PFAS)   |                                             |               |                |                |                                                    |  |  |  |
|------------------------------------|---------------------------------------------|---------------|----------------|----------------|----------------------------------------------------|--|--|--|
| Contaminants                       | EPA<br>Health<br>Advisory<br>Level<br>(HAL) | Your<br>Water | Sample<br>Year | Exceeds<br>HAL | Typical Source                                     |  |  |  |
| 11CI-PF3OUdS/F53B Major (ppt)      | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| 9CI-PF3ONS/F53B Minor (ppt)        | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| DONA/ADONA Acid (ppt)              | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| HFPO-DA/Gen X Acid (ppt)           | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| NEtFOSAA (ppt)                     | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| NMeFOSAA (ppt)                     | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorobutanesulfonic acid (ppt) | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorodecanoic acid (ppt)       | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorododecanoic acid (ppt)     | 70                                          | ND            | 2020           | No             | Manufacturing facilities,<br>landfills, wastewater |  |  |  |
| Perfluoroheptanoic acid (ppt)      | 70                                          | ND            | 2020           | No             | treatment plants, firefighting training facilities |  |  |  |
| Perfluorohexanesulfonic acid (ppt) | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorohexanoic acid (ppt)       | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorononanoic acid (ppt)       | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorooctanesulfonic acid (ppt) | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorooctanoic acid (ppt)       | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorotetradecanoic acid (ppt)  | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluorotridecanoic acid (ppt)    | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |
| Perfluoroundecanoic acid (ppt)     | 70                                          | ND            | 2020           | No             |                                                    |  |  |  |

| Unit Descriptions |                                                          |  |  |  |  |
|-------------------|----------------------------------------------------------|--|--|--|--|
| <u>Term</u>       | Definition                                               |  |  |  |  |
| NA                | NA: not applicable                                       |  |  |  |  |
| ND                | ND: Not detected                                         |  |  |  |  |
| NR                | NR: Monitoring not required, but recommended             |  |  |  |  |
| pCi/L             | pCi/L: picocuries per liter (a measure of radioactivity) |  |  |  |  |
| ppb               | ppb: parts per billion, or micrograms per liter (µg/L)   |  |  |  |  |
| ppm               | ppm: parts per million, or milligrams per liter (mg/L)   |  |  |  |  |
| ppt               | ppt: parts per trillion, or nanograms per liter (ng/L)   |  |  |  |  |
| PQL               | Practical Quantitation Limit of the best method          |  |  |  |  |

| Important Drinking          | Water Definitions                                                                                                                                                                                                                                         |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Term</u>                 | Definition                                                                                                                                                                                                                                                |
| AL                          | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.                                                                                                                                                          |
| HAL                         | EPA Health Advisory Level: established for individual or<br>combined concentrations of perfluorooctanoic acid (PFOA) and<br>perfluorooctanesulfonic acid (PFOS) Both chemicals are types<br>of polyfluoroalkyl substances (PFAS)                          |
| 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.                                                            |
| 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.                                                                                |
| MNR                         | Monitored Not Regulated.                                                                                                                                                                                                                                  |
| MPL                         | State Assigned Maximum Permissible Level.                                                                                                                                                                                                                 |
| 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                       | Maximum residual disinfection level goal. The level of a<br>drinking water disinfectant below which there is no known or<br>expected risk to health. MRDLGs do not reflect the benefits of<br>the use of disinfectants to control microbial contaminants. |
| SMCL                        | Secondary Maximum Contaminant Level: The level of a contaminant established as a guideline that is not considered to present a risk to human health at the SMCL.                                                                                          |
| Π                           | Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.                                                                                                                                                  |
| Variances and<br>Exemptions | EPA permission not to meet an MCL or a treatment technique under certain conditions.                                                                                                                                                                      |

## Violation(s) or Exceedance(s)

No drinking water quality violations or exceedances occurred during 2020

## Points of Contact

If you have any questions regarding this report or about the drinking water treatment 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 626-5486 or commercial 081-568-5486.