The Navy is pleased to provide you with this annual consumer confidence report on drinking water quality for FLCY Hachinohe. This report provides information about the water delivered to FLCY Hachinohe in 2017. It describes where our water comes from, what it contains, and how it compares to standards for safe drinking water. **The drinking water at FLCY Hachinohe is safe to drink.** Our goal is, and always has been, to provide safe and dependable drinking water.

**Source of Water**

Each of the three FLCY Hachinohe sites receives its drinking water from a metered connection to the Hachinohe Regional Water Supply Authority (HRWSA) system. HRWSA is the Japanese municipal authority which owns and operates the water sources, treatment facility, and storage and regional distribution systems. Drinking water at FLCY Hachinohe is surface water from the Mabechi River and the Niida River. The raw water is pumped to the Hakusan Water Treatment Plant where it receives full conventional treatment and chlorine disinfection. A schematic of the HRWSA system serving FLCY Hachinohe is shown below.

**Water Distribution System**

Water distribution networks at the three FLCY Hachinohe sites are administratively managed together as one water distribution system because all three sites receive treated water from the same source. Naval Air Facility Misawa Public Works Department (PWD) operates the water distribution system within the bounds of FLCY Hachinohe and manages compliance actions with all water quality requirements.

**Compliance with Drinking Water Requirements**

U.S. military installations overseas are required to meet all criteria established in the 2016 Japan Environmental Governing Standards, which are intended to ensure DoD activities and installations in Japan protect human health and the natural environment through specific environmental compliance criteria. Since 4 Feb 2013, all U.S. Navy installations are also required to meet or exceed U.S. National Primary Drinking Water regulations under the Safe Drinking Water Act of 1974, to ensure overseas drinking water systems meet the same water quality as required in the U.S. These standards require monitoring and testing of the drinking water for contaminants on a regular basis, ensuring it is safe to drink. PWD regularly conducts compliance audits to verify compliance, and sanitary surveys are conducted every three years by external teams. Discrepancies are summarized in a table on page 4 of this report.
Important Health Information
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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. US Environmental Protection Agency and Centers for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791 or visiting the EPA website at https://www.epa.gov/dwstandardsregulations/drinkin-g-water-contaminant-human-health-effects-information

Possible Sources of Contaminants
Drinking water, including bottled water, may reasonably be expected to contain trace amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791 or visiting the EPA website at https://www.epa.gov/dwstandardsregulations

As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals. It can also pick up other contaminants resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Other Potential Contaminants
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. PWD Misawa 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 more than six hours, you can further minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water

Disinfection Byproducts
Chlorine or other chemicals are added to drinking water during the treatment process to disinfect it from microbial contaminants such as viruses and bacteria. These chemicals also react with dissolved organic matter to produce chemical byproducts that may be harmful. As with other contaminants, these are carefully monitored to ensure consumer health.

Drinking Water Monitoring
PWD Misawa uses Japanese and EPA approved laboratory methods to analyze our drinking water and monitors drinking water for the following constituents.

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coliform Bacteria, pH, Chlorine, Temperature</td>
<td>Monthly</td>
</tr>
<tr>
<td>Disinfection Byproducts, Inorganic Chemicals, Volatile Organic Chemicals</td>
<td>Annually</td>
</tr>
<tr>
<td>Lead, Copper, PCBs, Herbicides and Pesticides</td>
<td>Every 3 years</td>
</tr>
<tr>
<td>Radionuclides</td>
<td>Every 4 years</td>
</tr>
<tr>
<td>Asbestos</td>
<td>Every 9 years</td>
</tr>
</tbody>
</table>

The table on below lists constituents detected during the latest round of required sampling. Only those
constituents detected are listed. The presence of a contaminant does not necessarily indicate the water poses a health risk. Drinking water samples were collected from each of the three sites, and the only concern identified was a low level of chlorine disinfectant during the warmest months. Although low, chlorine was consistently present to provide disinfecting action throughout the water system, and no bacteria were present during monthly testing. **FLCY Hachinohe drinking water remains safe and fit for human consumption.**

**Frequently Asked Question**

**Does the annual consumer confidence report indicate there is something wrong with the water, or that it’s unsafe?**

No, the water is safe to drink. Each U.S. Navy overseas installation is required by CNIC policy letter to provide its customers with a water quality report also known as a Consumer Confidence Report (CCR). The CCR is a general overview of the water quality delivered by your community water system. This report lists the regulated contaminants the community water system detected in the treated water and the level at which they were found for the preceding calendar year.

**FLCY HACHINOHE – DRINKING WATER CONTAMINANTS DETECTED**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Unit of Measure</th>
<th>Detected Level</th>
<th>Max Limit (MCL/MRDL*)</th>
<th>Violation?</th>
<th>Possible Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INORGANIC CONTAMINANTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barium</td>
<td>ppm</td>
<td>0.0054</td>
<td>0.0054</td>
<td>2</td>
<td>No</td>
</tr>
</tbody>
</table>
| Fluoride | ppm | 0.063 | 0.063 | 4 | No | Erosion of natural deposits  
Water additive |
| Nitrate | ppm | 1 | 1 | 10 | No | Erosion of natural deposits |
| Sodium | ppm | 9.8 | 9.8 | 200 | No | Erosion of natural deposits |
| **DISINFECTANTS & DISINFECTION BYPRODUCTS** | | | | | | |
| Residual Chlorine | ppm | 0.50 | 0.12 | 4* | No** | Disinfectant |
| Heptachlor Epoxide | ppt | 92 | Not detected | 200 | No | Chemical breakdown of the residue of a banned pesticide (heptachlor) |
| Total Trihalomethanes | ppb | 52 | 28 | 80 | No | By-product of chlorination |
| Halo Acetic Acids (HAA5) | ppb | 11 | 9.3 | 60 | No | By-product of chlorination |

**Notes:**

*Residual Chlorine - Maximum Residual Disinfectant Level.

**Abbreviations and Definitions:**

AL: Action Level. The concentration of a contaminant in water that establishes the appropriate treatment for a water system. AL is based on a 90th percentile value.

MCL: Maximum Contaminant Level. The highest level of a contaminant 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 contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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.

ND: Not Detected.

ppm: Parts per million. One liter in 1,000,000 liters, or one drop in 50 liters

ppb: Parts per billion. One liter in 1,000,000,000 liters, or one drop in 50,000 liters

ppt: Parts per trillion. One liter in 1,000,000,000,000 liters, or one drop in 50,000,000 liters
SUMMARY OF COMPLIANCE DISCREPANCIES

<table>
<thead>
<tr>
<th>Discrepancy</th>
<th>Consumer Health Impact</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low chlorine residuals have been measured</td>
<td>None – chlorine is added to drinking water to eliminate bacteria. No bacteria have ever been detected.</td>
<td>PWD is designing a system to automatically flush water pipes to increase the amount of fresh water containing higher levels of chlorine.</td>
</tr>
<tr>
<td>Laboratory used for bacteriological analysis does not meet Navy certification requirements</td>
<td>Very unlikely – although the laboratory does not meet Navy certification requirements, it does have a Japanese certification that meets other DoD requirements, and therefore the analytical results provided are highly reliable.</td>
<td>Navy authorities are working to reconcile US and Japanese laboratory standards in order to address this issue for all installations in Japan</td>
</tr>
</tbody>
</table>

Contacts

Installation Water Quality Board
The Installation Commanding Officer has established an Installation Water Quality Board (IWQB) tasked with ensuring there is a reliable supply of drinking water for all persons using FLCY Hachinohe facilities.

**Installation Water Quality Board**

Commander………………………………………………………………………………………………….  226-3005  
Fuel Director, FLCY Hachinohe…………………………………………………………………………….  226-5777  
Public Works Officer………………………………………………………………………………………..  226-3592  
Preventive Medicine, U.S. Naval Hospital………………………………………………………………  243-2616  
Public Affairs Officer…………………………………………………………………………………...…..  226-4363  
Installation Environmental Program Director…………………………………………………………. 226-2497  

Please contact the NAF Misawa Public Affairs Office at 226-4363 or Samuel.Bacon@fe.navy.mil for questions on drinking water in general.