

Consumer Confidence Report FLCY Hachinohe Drinking Water System 2017



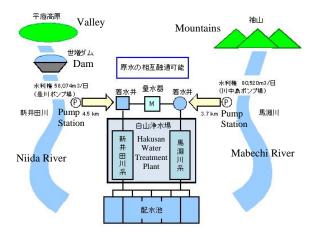
Naval Air Facility Misawa

Issued in accordance with Commander, Navy Installation Command Policy Letter 5200, Ser N4/13U84441, 15 Oct 13. This report reflects monitoring data collected in 2017 and will be updated annually.

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-effectsinformation

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/basicinformation-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.

Constituent	Frequency
Coliform Bacteria, pH, Chlorine,	Monthly
Temperature	
Disinfection Byproducts, Inorganic	Annually
Chemicals, Volatile Organic	
Chemicals	
Lead, Copper, PCBs, Herbicides	Every 3 years
and Pesticides	
Radionuclides	Every 4 years
Asbestos	Every 9 years

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**.

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.

Frequently Asked Question

Contaminant	Unit of Measure	Detected Level		Max Limit (MCL/	Violation?	Possible Source of Contamination
		High	Low	MRDL*)	, 101010111	
INORGANIC CONTAMINA	NTS					·
Barium	ppm	0.0054	0.0054	2	No	Erosion of natural deposits
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 & DISIN	FECTION BYPR	ODUCTS				
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

FLCY HACHINOHE - DRINKING WATER CONTAMINANTS DETECTED

Contaminant	Unit of Measure	90 th Percentile	AL (mg/L)	# of samples exceeding AL	Violation?	Possible Source of Contamination
Copper	ppm	0.12	1.3	0	No	Corrosion of household plumbing Erosion of natural deposits
Lead	ppb	4.6	15	0	No	Corrosion of household plumbing Erosion of natural deposits

Notes:

*Residual Chlorine - Maximum Residual Disinfectant Level.

**Chlorine residual should be maintained at a minimum of 0.2 mg/L to ensure against bacteriological growth in the distribution system. No bacteria have ever been detected in the drinking water.

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

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

SUMMARY OF COMPLIANCE DISCREPANCIES

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	
Fuel Director, FLCY Hachinohe	
Public Works Officer	
Preventive Medicine, U.S. Naval Hospital	
Public Affairs Officer	226-4363
Installation Environmental Program Director	

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