

2019 DFSP Hachinohe Drinking Water



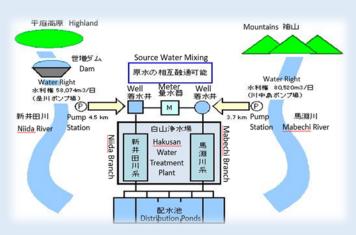
Naval Air Facility Misawa is pleased to provide you with this annual report on drinking water quality for Defense Fuel Support Point (DFSP) Hachinohe. This report provides information about the water delivered to DFSP Hachinohe in 2019. It describes where our water comes from, what it contains, and how it compares to standards set by the U.S. Navy's Overseas Drinking Water Program and the Japanese Environmental Governing Standards.

Source of Water

Drinking water at DFSP Hachinohe is purchased from the Hachinohe Regional Water Supply Authority (HRWSA), which owns and operates the Hakusan Water Treatment Plant (HWTP). HWTP treats surface water from the Mabechi River and the Niida River with conventional treatment and chlorine disinfection processes. In 2016 and 2019, HWTP was assessed by the Navy Water Quality Oversight Council to ensure drinking water quality. It was found to meet the water quality standard of safe and good quality. A schematic of the HRWSA system serving DFSP Hachinohe is shown below.

Water Distribution System

Water distribution networks at the three DFSP Hachinohe pump stations are administratively managed together as one water distribution system because all three stations receive treated water from the same source. The Naval Air Facility Misawa Public Works Department (PWD) operates the water distribution system within the bounds of DFSP 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 2018 Japan Environmental Governing Standards (JEGS), which are intended to ensure DoD activities and installations in Japan protect human health and the environment through specific environmental compliance criteria. Navy installations are 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 to ensure it is safe to drink. In 2019, a violation of the monitoring requirement for cyanide testing was identified and discussed in details on the last page of this report. PWD regularly conducts environmental audits to verify compliance, and a Sanitary Survey (SS) is conducted every three years by an external team. During the SS conducted in March 2019, 14 deficiencies were identified; however, 11 of the deficiencies were promptly resolved, and only three remain in the final state of closure. As a result, the Regional Water Quality Board granted DFSP Hachinohe a Conditional Certificate To Operate (CTO). A full CTO will be awarded when closure of the remaining three deficiencies is achieved.

Important Health Information

Certain individuals may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, the elderly, and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their



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health care providers. The U.S. Environmental Protection Agency (EPA) and the Center for Disease Control and Prevention have established guidelines on the appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants. This information can be obtained by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791.

Possible Sources of 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or visiting the EPA website at https://www.epa.gov/sdwa/drinking-water-contaminant-human-health-effects-information.

As water travels over the land surface 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, and wildlife.
- Inorganic contaminants, such as salts and metals, that 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 that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production. The contaminants can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

Other Potential Contaminants

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Infants and children who drink water containing lead in excess of 0.015 ppm could experience delays in their physical or mental development and show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. **DFSP Hachinohe lead sampling results met the lead drinking water requirements set forth in the 2018 JEGS and the EPA Lead and Copper Rule.** 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 two 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/ground-water-and-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.



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Drinking Water Monitoring

PWD Misawa uses Japanese and EPA approved laboratories to monitor and analyze drinking water for the constituents in the table on the right.

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

The table on the second to last page of this report lists contaminants detected in 2019. The presence of a contaminant does not necessarily indicate that the water poses a health risk. Drinking water samples were collected from each of the three sites for chlorine residual monitoring. Chlorine was consistently present to provide disinfecting action throughout the water system, and no bacteria was present during monthly testing. DFSP Hachinohe drinking water is fit for human consumption.

Frequently Asked Questions

Why is this Consumer Confidence Report needed?

Each U.S. Navy overseas installation is required to provide its customers with a water quality report also known as a Consumer Confidence Report. This report is a general overview of the water quality delivered by your drinking water system. This report lists the regulated contaminants detected in the treated water and the level at which they were found for the preceding calendar year. Any exceedances of applicable regulations or guidance will be reported.

Why does the water sometimes look rusty?

Rusty or reddish tinted water may occur when a sudden change in pressure in the water distribution system causes rust in the distribution pipes to become dislodged. Iron causes the discoloration and is not a health risk. If the water looks rusty, flush your tap for three minutes, or until clear, before using the water. If hot tap water is rusty, the water heater may need to be flushed.

I don't like the taste/smell/appearance of my tap water. What is wrong with it?

Even when water meets standards, you may still object to its taste, smell, or appearance. Taste, smell, and appearance are aesthetic characteristics and do not pose health risks. Common complaints about water aesthetics include temporary cloudiness (typically caused by air bubbles) or chlorine taste (which can be improved by letting the water stand exposed to the air). If you want to improve the taste, smell, and appearance of your water, you can install a home water filter. Please keep in mind that filters require regular maintenance and replacement, and if ignored, these aesthetic characteristics may return.

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Public Participation Opportunities and Contacts

The Installation Commanding Officer has established an Installation Water Quality Board tasked with ensuring there is a reliable supply of drinking water for all people using DFSP Hachinohe facilities.

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

Commander	226-3005
FLCY Hachinohe Fuel Director	226-5777
Public Works Officer	226-9726
Navy Clinic Preventive Medicine	243-6161
Public Affairs Officer	226-4363
Environmental Program Director	226-2497



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Detected Chemicals in Drinking Water

Contaminant and Unit	Range	MCL	MRDL	Violation	Typical Sources of Contaminants	
Inorganic Chemicals						
Barium (ppm)	0.0027	2	NA	No	Erosion of natural deposits	
Fluoride (ppm)	0.064	4	NA	No	Erosion of natural deposits, water additive	
Nitrate (ppm)	0.4	10	NA	No	Runoff from fertilizer use; leaking from septic tanks, sewage, erosion of natural deposits	
Sodium (ppm)	5.4	None	NA	No	Salt present in the water that is generally naturally occurring	
Disinfectant/Disinfection Byproducts						
Residual Chlorine (ppm)	0.2 - 0.64	4	4*	No**	Disinfectant water additive to control microbes	
Total Trihalomethanes (ppm)	0.0107 – 0.0149	0.08	NA	No	By-product of chlorination	
Halo Acetic Acids [HAA5] (ppm)	0.0011- 0.0105	0.06	NA	No	By-product of chlorination	
Lead and Copper	Range	AL	Samples > AL	Violation	Typical Sources of Contaminants	
Copper (ppm)	0.0031 - 0.023	1.3	0	No	Corrosion of household plumbing system, erosion of natural deposits	
Lead (ppm)	<0.00064 – 0.0022	0.015	0	No	Corrosion of household plumbing system, 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 has 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.

Drinking Water Sampling location at Pump Station 3



- **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.
- **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



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Monitoring Violation

In January 2020, we became aware that our system failed to collect the correct number of drinking water samples. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2019, we did not complete the annual monitoring for cyanide and therefore cannot be sure of the quality of our drinking water during that time.

Water samples were collected on 17 March 2020 and tested for cyanide at all three pump stations. The levels of cyanide in the drinking water samples were not detected.

There is nothing you need to do at this time and may continue to drink the water. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.