Misawa AB, JAPAN
Drinking Water
Consumer Confidence Report (CCR)
2020

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このレポートには飲料水に関する重要な情報が記載されています。この英文を訳してもらうか、またはどなたか英語が分かる方にたずねてください。

CONTENTS:

1. ACRONYMS AND TERMS USED IN THIS REPORT: The table below explains the acronyms, terms, and units of measure used in this CCR:

Table 1. Acronym/Term List

Unit Descriptions	
Term	Definition
mg/L	Milligrams per liter
ppm	Parts per million
pCi/L	Picocuries per liter
ppt	Parts per trillion
Important Drinking Water Definitions	
Term	Definition
Action Level	Concentration of a contaminant which if exceeded triggers treatment or other requirements which a water system must follow.
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	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.
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 Disinfectant 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.

Range	The range of the highest and lowest analytical values of a reported contaminant. For example, the range of reported analytical detections for an unregulated contaminant may be 10.1 ppm (lowest value measured in year) to 13.4 ppm (highest value measured in year). EPA requires this range to be reported.
Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.

Acronym Explanation	
Acronym	Explanation
AB	Air Base
CCR	Consumer Confidence Report
EPA	Environmental Protection Agency
N/A	Not Applicable
POL	Petroleum, Oils, and Lubricants

2. WHAT IS A CCR?

The U.S. Environmental Protection Agency (EPA) requires community water systems to provide annual drinking water quality reports to their customers. These reports, known as Consumer Confidence Reports (CCRs), enable people to make practical, knowledgeable decisions about their health and their environment.

3. WHERE DOES MISAWA's DRINKING WATER COME FROM?

The Air Force maintains three separate drinking water systems on Misawa AB (Main Base, North Area, Security Hill), and two separate water systems at the Draughon Range (Gate Area, Tower Area). The Main Base receives water from seven ground water wells and Lake Anenuma. The North Area receives its water from four north area ground water wells. Security Hill receives its water from two deep wells. Draughon Range contains two systems: the Air Force Range Office and surrounding buildings receive water from one ground water well, while the gate area receives its water from the City of Misawa. The City of Misawa receives its water from ground water wells. Bioenvironmental Engineering conducts water sampling for Air Force owned and operated systems. City water quality is monitored by the city of Misawa.

4. WHAT TYPES OF CONTAMINANTS MAY BE IN MY DRINKING WATER AND WHY?

a. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surfaces or through the ground it dissolves naturally occurring minerals, radioactive material, and substances resulting from the presence of animal 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and farming.
- Pesticides and herbicides--may come from a variety of sources such as agriculture, storm water runoff, and residences.
- Organic chemical contaminants--including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. Organic chemicals can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants--may be naturally occurring or manmade.

b. In order to ensure tap water is safe to drink, the Department of Defense prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. These limits are the same as those established by the EPA for drinking water in the US. Drinking water, including bottled water, may reasonably be

expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

c. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

d. Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. The highest levels of nitrate detected at Misawa Air Base are 2.5 ppm. If you are caring for an infant you should ask advice from your health care provider.

e. The 35 CES is responsible for providing high quality drinking water to the occupants and workers of Misawa Air Base. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. For this reason, Bioenvironmental Engineering samples for lead contamination. During the last sample events in 2020 for Main Base, North Area and Security Hill, all results were below the EPA action level. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. If you are concerned about lead in your drinking 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 at http://www.epa.gov/safewater/lead/.

5. IS OUR DRINKING WATER SAFE?

Yes. We receive high-quality water that meets the same standards as drinking water in the US. Civil Engineering provides constant treatment and maintenance of our water distribution system; while, Bioenvironmental Engineering Flight ensures water quality by collecting samples and analyzing our potable water.

6. HOW IS OUR DRINKING WATER TREATED?

Treatment systems are operated in a manner that ensures appropriate chemical concentrations are maintained throughout the distribution system. Table 2 below describes the treatment process for each location on the installation.

Table 2. Water Treatment

Location	Source	Water Treatment Processes
Main Base	Well Water	Sand sedimentation to remove suspended matter such as sand, dirt, rust, loose scale, clay or organic material from the water.
		Chlorination to disinfect/prevent distribution system contamination
		Fluoridation to prevent cavities in children
	Lake Water	Activated carbon filtration to absorb chemicals
		Coagulation/flocculation/sedimentation to remove algae/large particles
		Sand filter to remove particles
		Chlorination to disinfect/prevent distribution system contamination
		Fluoridation to prevent cavities in children
North Area	Well Water	Sand sedimentation to remove suspended matter such as sand, dirt, rust, loose scale, clay or organic material from the water.
		Chlorination to disinfect/prevent distribution system contamination
		Fluoridation to prevent cavities in children

Security Hill	Well Water	Sand sedimentation to remove suspended matter such as sand, dirt, rust, loose scale, clay or organic material from the water.
		Chlorination to disinfect/prevent distribution system contamination
Draughon Range Tower Area	Well Water	Chlorination to disinfect/prevent distribution system contamination
Draughon Range Gate Area	City Water	Chlorination to disinfect/prevent distribution system contamination Sand Stripping to remove suspended matter such sand, dirt, rust, loose, scale, clay or organic material from the water.

7. HOW OFTEN IS MISAWA's DRINKING WATER TESTED?

In compliance with Air Force and Department of Defense regulations, the Bioenvironmental Engineering Flight monitors for more than 100 possible substances in Misawa's drinking water at differing intervals. Table 3 below identifies the sampling they conduct.

Table 3. Contaminant Groups and Monitoring Frequencies

Contaminant Group	Examples	Monitoring Frequency
Biological Contaminants	Coliform bacteria	All water systems - Monthly
Inorganic Contaminants	Metals (e.g. lead, copper, selenium, arsenic, mercury, nickel)	Main Base Lake Water - Annually
		Main Base Well Water - Once every three years
		North Area - Once every three years
		Security Hill - Once every three years
	Nitrate, Nitrite, Total Nitrate and Nitrite	Main Base Lake Water Annually
		Main Base Well Water - Annually
		North Area - Annually
		Security Hill – Annually
Volatile Organic Compounds	Benzene, Trichloroethylene, Carbon Tetrachloride, etc.	Main Base Lake Water - Once every three years
		Main Base Well Water - Quarterly
		North Area - Once every three years
		Security Hill - Once every three years
Synthetic Organic Compounds	Pesticides, Herbicides, PCBs	Main Base Lake Water - two consecutive quarters every three years
		Main Base Well Water - two consecutive quarters every three years
		North Area - Once every three years
		Security Hill - Once every three years
Lead & Copper From Plumbing Materials	Lead, Copper	Main Base, North Area, Security Hill - Once every three years
Radiological Compounds	Gross Alpha and Beta, Radium 226	Main Base - Every four years (distribution system)
		North Area – Every four years (distribution system)
		Security Hill - Not required
Disinfectant By-Products	Trichloromethane, Haloacetic Acids (HAA5)	Main Base - Quarterly (distribution system)
		North Area - Annually
		Security Hill - Annually
	Total Organic Carbon, Alkalinity	Main Base - Quarterly

Non Regulated Compounds/Emerging Contaminants	PFAS (per- and polyfluoroalkyl substances)	Main Base - Quarterly North Area – Every three years Security Hill – Every three years Draughon Range Tower Area – Quarterly Draughon Range Gate Area – Every three years

Note :
It was determined the two water systems at Draughon Range are non-public water systems, and therefore the monitoring requirements listed in the 2020 Japan Environmental Governing Standards (JEGS) do not apply, except for total coliforms and disinfectant residual.

8. WHAT IS IN OUR DRINKING WATER?

The potable water of Misawa AB meets all the EPA and Air Force health standards. The vast majority of regulated substances were not found in the water of Misawa AB. The contaminants presented in the following tables are organized by the respective water distribution system. Only contaminants detected are reported, results below the analytical detection limit are not included. Some contaminants are not tested annually. In these cases, the most current results are reported even though the actual sample may have been collected in a previous year. The presence of contaminants in the water does not necessarily indicate a health risk.

Table 4. Detected Contaminants for Main Base Distribution System

Contaminant	MCLG	MCL	Highest Level	Sample Date	Above MCL?	Typical Source	Health Effects Language
Inorganic Contaminants							
Nitrate	10.0 mg/L	10.0 mg/L	2.5 mg/L	2020	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Fluoride	4.0 mg/L	4.0 mg/L	0.7 mg/L	2020	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Arsenic	0.0	0.01 mg/L	0.0015 mg/L	2020	No	Erosion of natural deposits; runoff from orchards; glass & electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Barium	2.0 mg/L	2.0 mg/L	0.0046 mg/L	2020	No	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Chromium, Total	0.1 mg/L	0.1 mg/L	0.0015 g/L	2020	No	Discharge from steel and pulp mills; erosion of natural deposits	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Nickel	0.1 mg/L	0.1 mg/L	0.0021 mg/L	2020	No	Leaching from metals in contact with drinking-water, such as pipes and fittings. However, nickel may also be present in some groundwaters as a consequence of dissolution from nickel ore-bearing rocks.	
Sodium	No MCLG	200 mg/L	22 mg/L	2020	No	Discharge from mines; discharge from petroleum refineries	
Copper	1.3 mg/L	Action Level[1] 1.3 mg/L	0.0064 mg/L	2018	No	Corrosion of household plumbing systems; erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.
Volatile Organic Compounds							
Tetrachloroethylene	zero	0.005 mg/L	0.0009 mg/L	2020	No	Discharge from factories and dry cleaners	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
Trichloroethylene	zero	0.005 mg/L	0.0038 mg/L	2020	No	Discharge from metal degreasing sites and other factories	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

Disinfectant By-products							
Total Trihalomethanes (TTHMs) (Veterinary Clinic)	See Note 1	0.08 mg/L	0.0348 mg/L	2020	No	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Haloacetic Acids (Veterinary Clinic)	See Note 1	0.06 mg/L	0.0106 mg/L	2020	No	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Trihalomethanes (POL)	See Note 1	0.08 mg/L	0.0281 mg/L	2020	No	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Haloacetic Acids (POL)	See Note 1	0.06 mg/L	0.0148 mg/L	2020	No	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Organic Carbon (Source)	See Note 2	N/A	2.55 mg/L	2020	No	Organic contaminants (natural organic substances, insecticides, herbicides, and other agricultural chemicals)	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
Alkalinity (Source)	See Note 2	N/A	62.4 mg/L	2020	No	Most alkalinity in water comes from calcium carbonate leached from rocks and soil.	
Total Organic Carbon (Treated)	See Note 2	N/A	0.904 mg/L	2020	No	Organic contaminants (natural organic substances, insecticides, herbicides, and other	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of

						agricultural chemicals)	disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
Alkalinity (Treated)	See Note 2	N/A	48.5 mg/L	2020	No	Most alkalinity in water comes from calcium carbonate leached from rocks and soil	

Note:
1. The reported reading is the running annual average of quarterly averages of all samples taken in the distribution system. Although there is no collective MCLG for this contaminant group, there are MCLGs for some of the individual contaminants:
- Trihalomethanes: bromodichloromethane (0 mg/L); bromoform (0 mg/L); dibromochloromethane (0.06 mg/L): chloroform (0.07 mg/L).
- Haloacetic acids: dichloroacetic acid (0 mg/L); trichloroacetic acid (0.02 mg/L); monochloroacetic acid (0.07 mg/L). Bromoacetic acid and dibromoacetic acid are regulated with this group but have no MCLGs.

2. Total Organic Carbon (TOC, a form of DBP Precursors) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (TTHM's) and haloacetic acids (HAA5's). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver, or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer. IAW 2020 JEGS, systems that use conventional filtration treatment (MB) must monitor each treatment plant water source for TOC on a monthly basis. Samples must be taken from the source water prior to treatment and the treated water not later than the point of combined filter effluent turbidity monitoring. Source water alkalinity must also be monitored at the same time. Neither MCLG nor MCL are outlined in the regulation.

Table 5. Detected Contaminants for North Area Distribution System

Contaminant	MCLG	MCL	Highest Level	Sample Date	Above MCL?	Typical Contaminant Source	Health Effects Language
Inorganic Contaminants							
Nitrate	10.0 mg/L	10.0 mg/L	0.1 mg/L	2020	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Arsenic	0.0	0.01 mg/L	0.0035 mg/L	2019	No	Erosion of natural deposits; runoff from orchards; glass & electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and

							may have an increased risk of getting cancer.
Barium	2.0 mg/L	2.0 mg/L	0.002 mg/L	2019	No	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Fluoride	4.0 mg/L	4.0 mg/L	0.7 mg/L	2019	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Nickel	0.1 mg/L	0.1 mg/L	0.0011 mg/L	2019	No	Leaching from metals in contact with drinking-water, such as pipes and fittings. However, nickel may also be present in some groundwaters as a consequence of dissolution from nickel ore-bearing rocks.	
Sodium	No MCLG	200.0 mg/L	11 mg/L	2019	No	Discharge from mines; discharge from petroleum refineries	
Copper	1.3 mg/L	Action Level[1] 1.3 mg/L	0.0084 mg/L	2018	No	Corrosion of household plumbing systems; erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People

							with Wilson's disease should consult their personal doctor.
Disinfectant By-products							
Total Trihalomethanes (TTHMs)	See Note 1	0.08 mg/L	0.0028 mg/L	2020	No	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Note:
1. The reported reading is the running annual average of quarterly averages of all samples taken in the distribution system.
Although there is no collective MCLG for this contaminant group, there are MCLGs for some of the individual contaminants:
- Trihalomethanes: bromodichloromethane (0 mg/L); bromoform (0 mg/L); dibromochloromethane (0.06 mg/L): chloroform (0.07 mg/L).
- Haloacetic acids: dichloroacetic acid (0 mg/L); trichloroacetic acid (0.02 mg/L); monochloroacetic acid (0.07 mg/L). Bromoacetic acid and dibromoacetic acid are regulated with this group but have no MCLGs

Table 6. Detected Contaminants for Security Hill Distribution System

Contaminant	MCLG	MCL	Highest Detected Level	Sample Date	Above MCL?	Typical Source	Health Effects Language
Inorganic Contaminants							
Nitrate	10.0 mg/L	10.0 mg/L	2.5 mg/L	2020	No	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Fluoride	4.0 mg/L	4.0 mg/L	0.1 mg/L	2018	No	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may

							include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Sodium	No MCLG	200.0 mg/L	22 mg/L	2018	No	Discharge from mines; discharge from petroleum refineries	
Lead [Note 1]	0.0	0.015 mg/L	0.0023 mg/L	2018	No	Corrosion of household plumbing systems; erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could 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.
Copper [Note 1]	1.3 mg/L	Action Level[2] 1.3 mg/L	0.0390 mg/L	2018	No	Corrosion of household plumbing systems; erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.
Disinfectant By-products							
Total Trihalomethanes (TTHMs)	See Note 2	0.08 mg/L	0.0324 mg/L	2020	No	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Haloacetic Acids	See Note 2	0.06 mg/L	0.0076 mg/L	2020	No	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an

							increased risk of getting cancer.

Note:
1. Lead and copper are regulated by a treatment technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps. For copper, the action level is 1.3 mg/L, and for lead is 0.015 mg/L.

2. The reported reading is the running annual average of quarterly averages of all samples taken in the distribution system. Although there is no collective MCLG for this contaminant group, there are MCLGs for some of the individual contaminants:
- Trihalomethanes: bromodichloromethane (0 mg/L); bromoform (0 mg/L); dibromochloromethane (0.06 mg/L): chloroform (0.07 mg/L).
- Haloacetic acids: dichloroacetic acid (0 mg/L); trichloroacetic acid (0.02 mg/L); monochloroacetic acid (0.07 mg/L). Bromoacetic acid and dibromoacetic acid are regulated with this group but have no MCLGs.

Table 7. Perfluorooctane sulfonate (PFOS) /Perfluorooctanoic acid (PFOA) (Emerging Contaminants)

Main Base Water System (Drinking Water)

Sample Timeframe	Contaminant	MCLG	MCL	Detected Level		Above MCL?	EPA Health Advisory	Typical Source
2020	PFAS (PFOS + PFOA)	N/A	N/A	Lowest	25.0	N/A	70 ppt	Runoff from firefighting foam/other every day products
				Highest	33.9			

Draughon Range Tower Area System (Drinking Water)

Sample Timeframe	Contaminant	MCLG	MCL	Detected Level		Above MCL?	EPA Health Advisory	Typical Source
2020	PFAS (PFOS + PFOA	N/A	N/A	Lowest	23.6 ppt	N/A	70 ppt	Runoff from firefighting foam/other every day products
				Highest	27.8 ppt			

Main Base Surface Water Treatment Facility (Lake Water)

Sample Timeframe	Contaminant	MCLG	MCL	Detected Level	Above MCL?	EPA Health Advisory	Typical Source
2020	PFAS (PFOS + PFOA)	N/A	N/A	18.5*	N/A	70 ppt	Runoff from firefighting foam/other every day products

Main Base Ground Water Treatment Facility (Ground Water)

Sample Timeframe	Contaminant	MCLG	MCL	Detected Level	Above MCL?	EPA Health Advisory	Typical Source
2020	PFAS (PFOS + PFOA)	N/A	N/A	65.0*	N/A	70 ppt	Runoff from firefighting foam/other every day products

Note:
Water System consists of wells, treatment facilities and distribution points
Background: PFOS and Perfluorooctanoic acid PFOA have been used for decades in many commercial products such as stain resistant carpeting, firefighting foam, nonstick cookware, fabric coatings and some food packaging. The EPA continues to develop the science on the general public health effects and to further evaluate whether these contaminants should be regulated in

drinking water. On May 19, 2016, the EPA established lifetime health advisory levels of 70 parts per trillion (ppt) for PFOA and PFOS in drinking water. These two compounds are classified as emerging contaminants due to evolving regulatory standards. Although PFOS/PFOA are unregulated and commonly used, the Air Force is taking aggressive measures to reduce the risk of mission-related PFOS/PFOA contamination to installation and supporting communities' drinking-water sources. According to Deputy Assistant Secretary of Defense for Environment (DASED(E)) memorandum dated May 22, 2019, subject "Policy for Centralized Management of Per- and Polyfluoroalkyl Substances Drinking Water Data.", DoD-owned drinking water systems have to be monitored for "PFAS" at each entry point to the distribution system.

* These are samples erroneously collected prior to treatment and mixing, not at the entry points to the distribution systems according to the policy fore mentioned, and thus are not a representative sample of PFAS found in the drinking water system.

9. WHERE CAN WE GET MORE INFORMATION?

Additional information regarding on-base water quality may be obtained by contacting the Bioenvironmental Engineering Flight at 226-6010. Public participation in decisions affecting drinking water quality may also be arranged through the Bioenvironmental Engineering Flight. In addition, customers can address any drinking water concerns during the quarterly Water Working Group meeting. Please contact 226-6010 for more information or to make an appointment to attend the meeting. This report is located on the Misawa Air Base web site at http://www.misawa.af.mil. The EPA's drinking water web site provides additional information at http://water.epa.gov/drink/.