IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

On Aug 4 and 7, 2023, the Bioenvironmental Flight, per Department of Defense policy, completed sampling of the major water sources on Misawa Air Base. The results exceeded the Environmental Protection Agency's Lifetime Health Advisory level of 70 parts per trillion (ppt) for Perfluorooctane Sulfanate and Perfluorooctanioic Acid (PFOS/PFOA). The measured level was 70.3 ppt. Misawa AB coordinated with the lead water authority and took immediate actions to reduce PFOS/PFOA concentrations. On Sep 10, 2023, repeat sampling of main base water source determined the PFOS/PFOA level was 9.1 ppt. Additional follow up testing was completed on October 23, 2023 of all the major water sources. The PFOS/PFOA levels ranged from 5.5 ppt to 18.4 ppt. See table below.

Sample Date	2023/10/23	2023/10/23	2023/10/24	2023/10/23	2023/10/23	2023/10/23
Location	North Area Distribution Point	Security Hill Distribution Point	Draughon Range	Medical Group	Main Base Water Tower 1	Main Base Water Tower 2
PFOS/PFOA ppt	3.7	0	18.4	5.5	13.5	12.7

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. PFOS and PFOA are in this group of chemicals. PFAS have been used in a variety of industries and consumer products around the globe, including in the U.S., 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 such as the aqueous film-forming foam used for fighting petroleum fires at airfields and in industrial fire suppression. 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.

What should I do?
There is no immediate risk for the general population. You can continue to use the installation's water supply.

What does this mean?
According to the EPA, over long periods of time PFAS may lead to weakening the body's ability to fight disease, increased risk of cancers, liver damage, and elevated cholesterol levels. Prolonged exposures to elevated PFAS levels over many years may also have negative health effects on vulnerable and immunocompromised populations, including pregnancy and child development. More information can be viewed at: http://www.epa.gov/

What is being done?
The Bioengineering Flight will repeat sampling every 6 months until results are below the advisory level of 70 ppt for two consecutive sampling events. Afterwards, sampling will occur on a two-year cycle. If any of the PFOS/PFOA results are above the advisory level, Misawa AB leadership will coordinate all the available resources to devise and implement mitigation actions. In addition, the sampling results will be made public within 30 days of receipt of final validated results.

For more information, please contact Bioenvironmental Engineering at 226-6010.

This notice is being sent to you by 35th Operational Medical Readiness Squadron, Bioenvironmental Engineering Flight.
Date distributed: 20 Dec 2023

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON DC

30 August 2023

MEMORANDUM FOR ALL MAJCOM/SGPB

FROM: AFMRA/SG3PB
7700 Arlington Boulevard
Falls Church, VA 22042

SUBJECT: Implementation Guidance, Sampling of Per-and Polyfluoroalkyl Substances (PFAS) in DoD-Owned Drinking Water Systems

1. This guidance implements Secretary of the Air Force direction and applies to all AF owned drinking water systems (regulated and unregulated) where the AF is the drinking water purveyor in and outside of the United States. These installations shall establish a routine monitoring program to conduct PFAS sampling and analysis in accordance with the attached Secretary of the Air Force memorandum (Attachment 1) and Assistant Secretary of Defense memorandum (Attachment 2). Where final governing standards, state or local regulations for PFAS are more stringent than this guidance, the more stringent standards shall apply.

2. Requirements.

a. By 31 December 2023, conduct initial round of water sampling from all AF-owned drinking water systems (regulated and unregulated) and analyze for all PFAS analytes using Environmental Protection Agency (EPA) method 533 and perfluorotetradecanoic acid (PFTeDA), perfluorotridecanoic acid (PFTrDA), N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA), and N-ethylperfluorooctanesulfonamidoacetic (NEtFOSAA) analytes using EPA method 537.1, and implement a routine surveillance plan based on the below criteria. Systems with EPA methods 533 and 537.1 results more current than 1 January 2022, are exempt from the initial round of water sampling. The EPA Unregulated Contaminant Monitoring Rule Five sampling, if accomplished in calendar year 2023, meets this initial round of water sampling.

b. Routine Surveillance Plan.

i. Systems with results indicating all PFAS analytes are below the minimum reporting limit (MRL) will sample at least once every two years. Both EPA methods 533 and 537.1 will be used when sampling on a two-year cycle.

ii. Systems with results indicating PFAS analytes above the MRL will sample semi-annually until results are below the MRL for two consecutive sampling events. Then sampling may proceed as described in paragraph (i) above. EPA method 533 is required for semi-annual sampling. If PFTeDA, PFTrDA, NMeFOSAA, or NEtFOSAA are detected above the MRL, EPA method 537.1 will also be required.

c. Confirm safe drinking water surveillance funds are available to meet these surveillance requirements with your Resource Management Officer. The safe drinking water surveillance funds are titled Environmental Compliance, Safe Drinking Water Surveillance (PEC 807756, Bag 7), located in Facilities Panel.

d. Utilize only approved DoD Environmental Laboratory Accreditation Program accredited laboratory or an EPA or state-accredited laboratory when DoD laboratories are unavailable.

e. If system water source is composed of a mixture of multiple drinking water wells, coordinate with Civil Engineer (CE) partners to document water supply percentage of each well at the time of PFAS sample collection. This data will inform possible mitigation measures if PFAS is detected above the MRL.

f. If any PFAS results are above the MRL, team with CE partners and the rest of the Drinking Water Working Group to evaluate health and future compliance risks, evaluate possible mitigation measures and begin mitigation planning. [1] If Perfluorooctanoic acid (PFOA), Perfluorooctane sulfonic acid (PFOS), or PFOS+PFOA results in finished drinking water exceed 70 parts per trillion (ppt), immediately inform CE partners, share all relevant sample results, and support CE partners with implementing immediate mitigation actions.

g. Track and record all PFAS drinking water results and location data (building number and geospatial coordinates) in DOEHRS. DOEHRS will be used to meet the routine OSD reporting requirements.

h. Post sampling results of detected PFAS (>MRL) on the installation's public webpage within 30 days of receipt of final validated results. If a Consumer Confidence Report is published for the system, include detected PFAS (>MRL) results.

3. MAJCOMs communicate any sampling shortfalls to AFMRA/SG3PB NLT 31 October 2023.

4. If you have specific questions regarding this guidance, my POC is Mr. Scott McDonald at 703-681-7626, shannon.s.mcdonald.civ@health.mil. If you have laboratory or sample analysis questions, please contact the ESOH Service center at 1-888-232-ESOH (3764), ESOH.Service.Center@us.af.mil.

CHARLES B. TOTH, Lt Col, USAF, BSC
Chief, Bioenvironmental Engineering
Air Force Medical Readiness Agency

Attachments:
1. Sampling of Per-and Polyfluoroalkyl Substances in DoD-Owned Drinking Water Systems, 28 Aug 23
2. Memorandum for Sampling of Per- and Polyfluoroalkyl Substances in DoD-Owned Drinking Water Systems, 11 Jul 23

[1] Per DoD, AF Water Purveyors will compare sample results to the proposed National Primary Drinking Water Regulation for PFAS and use this information to develop plans to mitigate compliance with the final regulation. CE partners are lead on mitigation planning.