



**DEPARTMENT OF THE ARMY**  
**OFFICE OF THE DEPUTY CHIEF OF STAFF, G-9**  
**600 ARMY PENTAGON**  
**WASHINGTON, DC 20310-0600**

DAIN-ISE

MEMORANDUM FOR

U.S. Army Materiel Command (AMIL-E), 4400 Martin Road, Redstone Arsenal, AL  
35898

Headquarters, Installation Management Command (IMPW-SE), 2405 Gun Shed Road,  
JBSA – Fort Sam Houston, TX 78234

U.S. Army Environmental Command (IMAE-Z, IMAE-I), 2450 Connel Road, Fort Sam  
Houston, TX 78234-7664

National Guard Bureau (ARNG-ILE), 111 South George Mason Drive, Arlington, VA  
22204-1382

U.S. Army Reserve (DAAR-IM), 2400 Army Pentagon, Washington, DC 20310-2400  
Arlington National Cemetery (SAAC-ANMC), 1 Memorial Avenue, Arlington, VA 22211

SUBJECT: Supplemental Drinking Water Management Guidance for Per- and  
Polyfluoroalkyl Substances at US Army Installations

1. Reference:

a. Memorandum, DAIM-IS, 29 Aug 16, Department of Army Guidance to Address  
Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) Contamination.

b. Memorandum, DAIM-ISE, 21 June 17, Supplemental Drinking Water Monitoring  
Guidance for Perfluorooctane Sulfonate and Perfluorooctanoic Acid.

c. Memorandum, ASD(S), 2 Mar 20, Per-and Polyfluoroalkyl Substances Sampling  
of Department of Defense Drinking Water Systems.

d. Memorandum, ASD(S), 23 Jul 20, Monitoring of Per- and Polyfluoroalkyl  
Substances Sampling for Installations with Non-Department of Defense Drinking Water  
Systems.

e. Memorandum, ASD(S), 18 Sep 20 Guidance for Agreements to Share Monitoring  
Data Related to Per- and Polyfluoroalkyl Substances and Other Emerging  
Contaminants of Concern.

2. Purpose: This memorandum combines and supplements documents in References (a.) through (e.) to establish a comprehensive Per- and Polyfluoroalkyl Substances (PFAS) drinking water (DW) management guidance for US Army installations. This guidance supersedes and cancels Reference b. and is effective immediately.

3. Applicability: This guidance will apply to all Army installations worldwide. Overseas installations will follow this guidance unless more stringent guidance or requirements are established by the Lead Environmental Component through Overseas Environmental Baseline Guidance Document/Final Governing Standard process. Where properly promulgated state, local, or federal regulations for PFAS are more stringent than the guidance provided in this memorandum, the more stringent regulations will apply. This document does not provide guidance for any remediation conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

4. Background: The Army is committed to protecting human health and ensuring its DW systems meet state and federal standards, as applicable. The Army will maintain commitment to protecting our Soldiers, their families and the communities surrounding Army installations and to proactively monitor Army DW systems.

5. My point of contacts for this action is Mr. Michael Khalamayzer, (571) 256-9712, michael.khalamayzer2.civ@mail.mil.

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as

BRANDYE L. WILLIAMS  
COL, CM  
Chief, Army Environmental Division

## Supplemental Drinking Water Management Guidance for Per- and Polyfluoroalkyl Substances at US Army Installations

### *References:*

- a. Memorandum, DAIM-IS, 29 Aug 16, Department of Army Guidance to Address Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid (PFOA) Contamination.
- b. Memorandum, DAIM-ISE, 21 June 17, Supplemental Drinking Water Monitoring Guidance for Perfluorooctane Sulfonate and Perfluorooctanoic Acid.
- c. Memorandum, ASD(S), 2 Mar 20, Per-and Polyfluoroalkyl Substances Sampling of Department of Defense Drinking Water Systems.
- d. Memorandum, ASD(S), 23 Jul 20, Monitoring of Per- and Polyfluoroalkyl Substances Sampling for Installations with Non-Department of Defense Drinking Water Systems.
- e. Memorandum, ASD(S), 18 Sep 20 Guidance for Agreements to Share Monitoring Data Related to Per- and Polyfluoroalkyl Substances and Other Emerging Contaminants of Concern.

### *Purpose:*

Replace the Army Guidance in Reference (b), supplement Army Guidance in Reference (a) and implement policies in References (c) through (e). Provide Army guidance regarding drinking water (DW) management for PFAS at US Army installations worldwide.

### *Applicability:*

This guidance will apply to all Army installations worldwide. Overseas installations will follow this guidance unless more stringent guidance or requirements are established by the Lead Environmental Component through Overseas Environmental Baseline Guidance Document/Final Governing Standard process. Where properly promulgated state, local, or federal regulations for PFAS are more stringent than the guidance provided in this memorandum, the more stringent regulations will apply. This document does not provide guidance for response actions conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

*Background:*

The Army is committed to protecting human health and ensuring its DW systems meet state and federal standards, as applicable. The Army will maintain commitment to protecting our Soldiers, their families and the communities surrounding Army installations and to proactively protecting the integrity of Army DW through the actions required by this guidance.

*Drinking Water Monitoring Data Management and Sharing:*

To effectively track and report PFAS drinking water data, all PFAS data collected from the drinking water systems that provide DW to Army installations, regardless of DW purveyor, will be documented in the Defense Occupational and Environmental Health Readiness System (DOEHRS). DOEHRS will be the Army system of record to document results of drinking water sampling for PFAS.

At least once per year, the Commands will conduct an assessment of the DW data in DOEHRS as it relates to the DW systems under their purview. The DW data must be checked for completeness and accuracy and any errors will be corrected within 90 days of discovery. The Office of the Deputy Chief of Staff, G-9 Environmental Division will assess execution of this requirement during the annual Program Management Review or a data call.

In accordance with Reference (e), Army installations will seek to enter into agreements with municipalities or municipal drinking water utilities adjacent<sup>1</sup> to military installations to jointly share drinking water monitoring data for PFAS and other emerging contaminants.

When Army installations confirm presence of PFAS or other emerging contaminant of concern in a DW system or wish to obtain DW monitoring data from the local community, the installation will contact the local municipality or municipal drinking water utility to request joint sharing of DW data. To the greatest extent practicable, Army installations will use already existing websites or other existing technologies to share this data.

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<sup>1</sup> For the purpose of this memorandum, "...municipalities or municipal drinking water utilities adjacent to military installations" is defined as: a municipality or drinking water utility located within one mile down-gradient of a release from a military installation where the release may migrate and impact the drinking water system or municipality; or municipalities or public water systems that provide potable water to the military installation.

### *Public Notification Requirements:*

All Army DW Water Systems, regardless of the purveyor, that have PFOA, PFOS, or PFOS + PFOA results exceeding the HA level in DW will post public notices using all practical methods of public communication readily available including, but not limited to the installation's public webpage, installation's social media accounts, newsletter or other printed media. The notification will be made as soon as practicable but no later than 30 days from receipt of sampling results. Systems will repeat this notice every three months until results are below the HA. Additionally, these results will be included in the systems' annual Consumer Confidence Reports (CCR), where CCRs are required at an installation.

All Army DW Water Systems, regardless of the purveyor, that have PFOA, PFOS, or PFOS + PFOA results that are less than HA in DW, including results less than the method reporting limit (MRL), will post a public notice using readily available methods of public communication. Additionally, these annual Consumer Confidence Reports (CCR), where CCRs are required at an installation.

### *Installation Response to PFAS Impacted DW:*

Regardless of the DW purveyor, if DW is found to be impacted with PFAS above PFOS/PFOA HA or regulatory standards the installation must, as soon as possible, provide residents and personnel with alternate DW, such as temporary bottled water that meets applicable PFAS standards until a more permanent solution is found. Interim solutions, before a long term solution is found, could include providing residents and workplaces with 'under the sink' filtration systems, such as, ion exchange resins (IX) or granular activated carbon (GAC) filters. These filter systems should be checked as to viability of removing PFAS below applicable PFAS standard and will also require change out of IX or GAC cartridges. When considering long term treatment for DW systems the Commands should consider a GAC system and/or ion IX systems either separately or in tandem. Additionally, connecting with a local municipal water system should be evaluated, at installations where such connection does not exist. Installations working with privatized housing and/or where the non-DoD purveyor is a DoD contractor, must ensure coordination with the Contracting Officer Representative (COR) on any communications with the contractor.

### *DW Monitoring Where the Army is the Purveyor:*

For Army installations that have DW systems for which the Army is the DW purveyor (i.e., supplies the drinking water on the installation), finished water samples are to be collected at each entry point to the distribution system (EPDS). For an EPDS that relies

on more than one water source for its supply, supplemental monitoring samples are to be collected from each water source associated with that EPDS prior to any treatment.

All DW samples will be analyzed using EPA Method 537.1.

At all Army installations where the Army is the DW purveyor, the following PFAS Monitoring Schedule will be implemented until this guidance is superseded or rescinded.

a. Installations where PFAS monitoring results were below the MRL, will sample water system(s) once every three (3) years.

b. Installations where PFAS analytes exceed the MRL, but are below the PFOS/PFOA HA (70 ppt) will sample quarterly for one (1) year and once every two (2) years thereafter until the results are below the MRL. Then, sampling may proceed as described in a. The initial quarterly monitoring sample will be taken no more than 90 days from obtaining sampling results indicating exceedance.

c. Installations where PFOS/PFOA concentrations exceed the HA in EPDS finished water or monitored EPDS source water will sample quarterly and continue until results are below the HA for four (4) consecutive quarters. Then, sampling may proceed as described in b. The initial quarterly monitoring sample will be taken no more than 90 days from obtaining sampling results indicating exceedance.

To establish a DW monitoring schedule, the installation will use its highest PFAS concentrations as the benchmark. For installations with multiple sampling locations, the most robust monitoring frequency outlined above will be used for all sampling locations. If PFAS levels increase during the monitoring period, the facility will immediately change monitoring frequency to the schedule appropriate to the highest level detected.

#### *DW Monitoring Where the Army is Not the Purveyor:*

At Army installations where the Army is not the DW purveyor (i.e. a DW system that supplies water to an Army installation, but is not owned by the Army), the Army installation will request the most recent finished drinking water sampling data for PFAS from the purveyor within 180 days of receipt of this guidance. If PFAS sampling data is not received from the purveyor within 90 days of the request, the Army installation will conduct sampling of its finished water, in accordance with the guidance below. In all instances where the non-DoD purveyor does not provide sampling data, notification must be sent through the chain of command to DCS G-9, Environmental Division.

If the non-Army purveyor did not sample drinking water for PFAS in the past three years, or if the most recent sample results are over one (1) year old and show detection(s) above the MRL, the Army installations will request in writing (template at Attachment 1) that the non-DoD purveyor collect a new sample and provide the data within 90 days. If the non-DoD purveyor is a DoD contractor, ensure coordination with the COR on any communications with the contractor.

If the non-Army purveyor indicates they will not provide drinking water sampling data or conduct drinking water sampling for PFAS, provide notice to the non-Army purveyor (template at Attachment 2) that the Army will sample finished drinking water at a location nearest the entry point to the installation's drinking water system. The Army will then collect at least one sample at each entry point to the installation's distribution system and submit for laboratory analysis using EPA Method 537.1. To the greatest extent practicable, samples will be taken prior to any additional treatment provided by the Army installation. In all instances where the non-DoD purveyor declines to provide this information, notification must be sent through the chain of command to DCS G-9, Environmental Division.

If results of sampling conducted by the non-DoD purveyor or the Army installation indicate exceedance of the HA or a promulgated PFAS DW standard, the installation will request the purveyor take immediate action to decrease the PFOS/PFOA levels to below HA and/or promulgated PFAS standard. If the purveyor is unwilling to take such action, document this information, and coordinate with appropriate chain of command and legal office to immediately pursue actions to mitigate exposure to drinking water with levels of PFOS/PFOA above the HA or a promulgated PFAS standard on the installation. Additionally, installations will notify DCS G-9 Environmental of the situation through the appropriate chain of command.

Installations that receive DW from a non-DoD purveyor, will establish a periodic PFAS monitoring program for DW. Preferably that installation will work cooperatively with the non-DoD purveyor to monitor the DW.

a. Installations where supplied DW PFOS/PFOA concentrations were below the MRL will either obtain new sample results from the purveyor or take a sample at a minimum of once every three (3) years.

b. Installations where total PFAS concentrations exceed the MRL but PFOS/PFOA concentrations are below the HA (70 ppt) will either obtain new sample results from the purveyor or take samples annually for two (2) years and once every two (2) years thereafter.

c. Installations where PFOS/PFOA concentrations exceed the HA will obtain new sample results from the purveyor or take DW samples quarterly starting 90 days from

discovery of exceedance. Installations will continue quarterly requests for data or sampling until results are below the HA for four (4) consecutive quarters. Then, sampling may proceed as described in paragraph b.

*Exceptions:*

For both Army and Non-Army purveyor DW systems, should a circumstance occur where lowering of the monitoring frequency outside the parameters described above is prudent, does not increase consumer risk of exposure to PFOS/PFOA above HA, and is in compliance with promulgated Federal, State and local regulations, an Army installation may request an exception to the sampling schedule through its Command Headquarters to DCS G-9 Environmental. Upon review of the request, if appropriate, DCS G-9 Environmental may grant an exception after consultation with and approval by OASA IEE.



**Attachment 1**

**Letter Template  
PFAS Sample Results Request from Non-Army Purveyor**



DEPARTMENT OF THE ARMY  
US ARMY INSTALLATION NAME  
STREET ADDRESS  
CITY, STATE 12345-1234

Month DD, YYYY

SUBJECT: Request for Per- and Polyfluoroalkyl Substances Sampling Data from Finished Drinking Water Provided to Military Installations By Non-Department of Defense Drinking Water Purveyors

Mr. John Doe  
Drinking Water Utility  
123 Main Street  
Anytown, TN 12345

Dear Mr. Doe:

On July 23, 2020, the Department of Defense (DoD) issued a Policy on monitoring for per- and polyfluoroalkyl substances (PFAS) at military installations where drinking water is provided by a non-DoD purveyor. As part of DoD's PFAS strategy to ensure drinking water provided to our installation consumers does not contain PFOA/PFOS above 70 parts per trillion for either compound or combined total, [Military Installation] is requesting [non-Army purveyor] to provide all finished drinking water sampling data for PFAS to [Military Installation] within 30 days from the date of this letter.

If no PFAS sampling data is available, or previous sampling data is greater than one (1) year old and showed detections of PFAS above the method reporting limit, [Military Installation] is requesting [non-DoD purveyor] to conduct sampling for PFAS in the finished drinking water that is provided to [Military Installation] using the approved Environmental Protection Agency Method, i.e. 537.1, and provide those results to [Military Installation] within 90 days from the date of this letter.

Once the results of sample analyses are received, [military installation] would like to discuss future sampling of finished drinking water for PFAS with [non-Army purveyor] to ensure the health and safety of consumers. Thank you for your careful consideration in this matter as the Army/DoD leans forward to protect our communities.

If you have any questions, please contact [POC] from [Military Installation] at [phone] or by email at [email].

Sincerely,

Paul C. Jones  
COL, USA  
Commanding

**Attachment 2**

**Letter Template  
Drinking Water System PFAS Sampling Notice to Non-Army  
Purveyor**



DEPARTMENT OF THE ARMY  
US ARMY INSTALLATION NAME  
STREET ADDRESS  
CITY, STATE 12345-1234

Month DD, YYYY

SUBJECT: Military Installation-Conducted Sampling for Per- and Polyfluoroalkyl Substances in Finished Drinking Water Provided by Non-Department of Defense Drinking Water Purveyors

Mr. John Doe  
Drinking Water Utility  
123 Main Street  
Anytown, TN 12345

Dear Mr. Doe:

On July 23, 2020, the Department of Defense (DoD) issued a Policy on monitoring for per- and polyfluoroalkyl substances (PFAS) at military installations where drinking water is provided by a non-DoD purveyor. As part of DoD's PFAS strategy to ensure drinking water provided to our installation consumers does not contain PFOA/PFOS above 70 parts per trillion for either compound or combined total, [Military Installation] will conduct PFAS sampling of finished drinking water at the entry point to [Military Installation's] drinking water distribution system. [Military installation] will use the approved Environmental Protection Agency Method, i.e. 537.1, and provide those results to [non-DoD purveyor] within 90 days from the date of this letter. As required by DoD Policy, [Military Installation] will post a public notice of the results of sampling on the installation's public webpage as soon as practical but no later than 30 days from receipt of sampling results.

If you have any questions, please contact [POC] from [Military Installation] at [phone] or by email at [email].

Sincerely,

Paul C. Jones  
COL, USA  
Commanding