



Evaluation of the Department of Defense's Actions to Control Contaminant Effects from Perfluoroalkyl and Polyfluoroalkyl Substances at Department of Defense Installations (DODIG-2021-105)

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Objective

The objective of this evaluation was to determine the extent that the DoD has taken steps to:

- identify, mitigate, and remediate contamination from perfluoroalkyl and polyfluoroalkyl substances (PFAS) at DoD installations; and
- identify populations exposed to PFAS at DoD installations and inform them of the associated health and safety concerns.

Background

In a July 25, 2019 letter, 31 members of Congress requested that the DoD Office of Inspector General (DoD OIG) “undertake a review of the U.S. Department of Defense’s (DoD’s) use of PFAS at military sites around the country and the exposure of both military personnel and civilians living near military sites.” In response to the congressional letter, the DoD OIG announced this evaluation on February 3, 2020.

PFAS are fire-resistant, man-made chemicals that repel oil, grease, and water. Products that contain PFAS can be found in almost every U.S. home and business;

however, some products containing PFAS are largely limited to the DoD and other heavy industries. One such product is Aqueous Film Forming Foam (AFFF), which the DoD began using in the 1970s as a fire suppressant to fight dangerous petroleum-based fires.

The DoD, the Military Departments, and the Defense Logistics Agency have issued policies and established programs and organizations that require their officials to, among other things, manage Environment, Safety, and Occupational Health risks caused by their activities; perform environmental cleanup; control health hazards associated with exposures to chemical, physical, and biological hazards in DoD workplaces; and perform medical surveillance to identify illness trends and annual occupational medical examinations for firefighters.

Additionally, DoD officials issued DoD Instruction (DoDI) 4715.18, requiring proactive evaluations and risk management for “emerging chemicals of environmental concern.” We refer to “emerging chemicals of environmental concern” as emerging chemicals (ECs) and the program as the EC Program throughout this report. Furthermore, in 2019 and 2020, Congress included PFAS requirements in the National Defense Authorization Act, including the requirement that the Secretary of Defense “provide blood testing to determine and document potential exposure to... PFAS for each firefighter of the [DoD] during their annual physical exam” beginning in FY 2021.

Findings

DoD officials have taken steps to identify, mitigate, and remediate contaminant effects from PFAS-containing AFFF at DoD installations, including restricting nonessential use of AFFF and initiating Federal cleanup response actions. However, DoDI 4715.18 requires DoD officials to proactively mitigate contaminant effects from ECs at DoD installations when risk management actions are endorsed by the Emerging Chemicals of Concern Governance Council. EC Program officials included PFOS and PFOA on the EC Watch List. They commissioned impact assessment reports. EC Program officials issued a risk alert in 2011 that described risks to DoD areas of concern, including risks to human health and the environment. However, the 2011 risk alert was not a risk management action because it was not endorsed by the Emerging Chemicals of Concern Governance Council. Therefore, DoD officials were not required to plan, program, and budget for any actions in response to the 2011 risk alert. EC Program officials did not require proactive risk management actions for PFAS-containing AFFF until 2016. This occurred because DoDI 4715.18 does not include objective requirements for EC Program officials to use when determining when to initiate risk management actions or to elevate an EC from the EC Watch List

to the EC Action List. As a result, people and the environment may have been exposed to preventable risks from PFAS-containing AFFF.

Additionally, DoDI 4715.18 requires DoD officials to apply an enterprise-wide approach to mitigate contaminant effects from ECs. An enterprise-wide approach would address all sources of potential EC exposure caused by DoD activities and the impacts of that exposure to DoD areas of concern. EC Program officials identified PFOS and PFOA. EC Program officials commissioned impact assessment Reports. DoD officials have not proactively identified, mitigated, and remediated contaminant effects from PFAS-containing materials other than AFFF at DoD installations. Therefore, DoD officials did not apply an enterprise-wide approach to mitigate the contaminant effects of all sources of potential PFAS exposure caused by DoD activities, as required by DoDI 4715.18. This occurred because DoD officials were focused on AFFF, a major source of potential PFAS exposure, and not on all sources of potential PFAS exposure caused by DoD activities. As a result, people and the environment may continue to be exposed to preventable risks from other PFAS-containing materials.

DoD officials have taken steps to identify populations exposed to PFAS at DoD installations and inform them of the associated health and safety concerns. These steps include identifying sources of water containing PFAS and providing PFAS health-related information to military medical treatment facilities. DoDI 6055.05 requires DoD Components to implement risk management steps, including evaluating occupational and environmental health risk management. These risk management steps include tracking, trending, and analyzing clinical examination results related to workplace exposures.

Recommendations

We recommend that the Under Secretary of Defense for Acquisition and Sustainment (USD[A&S]) revise DoDI 4715.18 to include requirements for Emerging Chemical Program officials to:

- initiate proactive risk management actions based on measurable risks to the DoD areas of concern to mitigate contaminant effects of emerging chemicals at DoD installations;
- develop risk management options and initiate proactive risk management actions which may be warranted to identify and mitigate the contaminant effects of emerging chemicals as early as possible in the Emerging Chemical Process, regardless of whether an emerging chemical is on the

Emerging Chemical Watch List or the Emerging Chemical Action List; and

- formally inform DoD users of emerging chemicals and of their status in the Emerging Chemical Process.

We recommend that the Deputy Assistant Secretary of Defense (Environment and Energy Resilience) complete the Emerging Chemical Process for potential PFAS exposure caused by DoD activities from PFAS-containing materials other than AFFF by developing and presenting validated risk management options for PFAS on the Emerging Chemical Action List to the Emerging Chemicals of Concern Governance Council, as required by DoDI 4715.18.

We recommend that the Assistant Secretary of Defense (Readiness) (ASD[R]) develop a plan to track, trend, and analyze DoD firefighter PFAS blood test results at a DoD-wide level, in accordance with DoDI 6055.05.

Management Comments and Our Response

The Acting Assistant Secretary of Defense (Sustainment) (ASD[S]), responding for the Under Secretary of Defense for Acquisition and Sustainment, partially agreed with the recommendations to revise DoDI 4715.18. However, comments from the Acting ASD(S) addressed the recommendations; therefore, the recommendations are resolved but will remain open.

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