

Hearing Number: HECC-01-2018

Hearing Date: September 6, 2018

Committee: House Energy and Commerce Committee

Sub-committee: House Energy and Commerce Subcommittee on Environment and the Economy

QFR Title: Aqueous Film Forming Foam (AFFF)

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-001 QFR

Question Number: 1

Question: Your written testimony states that the Department of Defense's (DoD's) use of Aqueous Film Forming Foam (AFFF), one of the PFAS compounds is "limited" - could you estimate for us what percentage of AFFF's usage was by DoD?

Answer: Only approximately 3-6% of PFOS production in calendar year 2000 was used for firefighting foam. DoD is one of seven sectors the Fire Fighting Coalition analyzed in their July 11, 2011 document – “Estimated Inventory of PFOS-based Aqueous Film Forming Foam (AFFF)”. The original inventory was conducted in 2004 and updated in 2011. Based on the Coalition’s analysis, it is estimated that DoD purchased approximately 45% of the PFOS-based AFFF in the United States and consumes or uses approximately 5-10% of our AFFF per year. The inventory includes AFFF maintained in firefighting equipment, hanger suppression systems, reserve supplies, and Navy ships.

QFR Title: Drinking Water

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-002 QFR

Question Number: 2

Question: Your written testimony indicates that DoD began testing drinking water in drinking water systems on military installations in June 2016 to determine whether there were exceedances of EPA's Lifetime Health Advisory. Your testimony provides some facts regarding the number of installations that had exceedances of EPA's Lifetime Health Advisory, but the numbers are a bit confusing. Your testimony states that there were 24 installations that exceeded EPA's Lifetime Health Advisory and that DoD was providing bottled water or "additional water treatment" - a. What is the "additional water treatment"? b. Your written testimony also states that there were 12 drinking water systems where the results were above EPA's Lifetime Health Advisory-is it 12 or 24? Or what is the difference between the 24 identified that are receiving bottled water and the 12 where DoD is "working with the drinking water supplier(s) to encourage appropriate actions"?

Answer: a. For drinking water systems that test above the EPA LHA level, DoD is following EPA's health advisory recommended actions to ensure no one is drinking water with elevated levels of PFOS and/or PFOA. These actions include, but are not limited to: • Publicly notifying water consumers; • Shutting down a well(s); • Retesting; • Providing alternative drinking water; and • Adding a granular activated carbon filter to the well. b. DoD owns and operates 524 drinking water systems worldwide on its installations. Of the 524 DoD-owned drinking water systems, DoD identified 24 that tested above the EPA LHA levels and has taken appropriate action to reduce PFOS/PFOA below the EPA LHA levels. Where DoD is not the drinking water supplier for its installations, 12 systems tested above the LHA level. DoD

worked with the drinking water supplier to determine appropriate actions consistent with the EPA recommended actions.

QFR Title: PFAS Contamination

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-003 QFR

Question Number: 3

Question: Your testimony is that DoD is prioritizing sites that have PFAS releases to drinking water according to "worse first." Can you walk us through what that means and what is included in the analysis? a. Would you also walk us through how PFAS contamination in other media is incorporated into that analysis?

Answer: The Department follows a comprehensive approach to identify installations where DoD used AFFF containing PFOS or PFOA. The Department's first priority is to determine if anyone is drinking water above the Environmental Protection Agency's Lifetime Health Advisory and if the source is from the Department's activities. The Department will work quickly with the local water authority or the home owner to stop high risk exposures. The Department prioritizes sites with a known or suspected release of PFOS or PFOA for investigation and cleanup, if necessary, using a risk-based approach. Site prioritization of "worst first," means the DoD Components will address sites that pose a greater potential risk to human health or the environment before sites posing a lesser risk. To determine a site's risk, DoD uses the relative risk site evaluation to prioritize sites with known or suspected releases of hazardous substances or pollutants and contaminants, such as PFOS or PFOA. There are three categories of risk: high, medium, or low relative risk. This process evaluates each environmental medium (e.g., drinking water, dermal contact with soil) based on the nature and extent of the site's contamination, the likelihood that contaminants will migrate, and potential impacts on populations and ecosystems. At the end of the risk evaluation process, each medium (soil, water, etc.) will have an assigned category of risk. The site is then prioritized based on the medium with the highest risk site evaluation rating.

QFR Title: EPA's Lifetime Health Advisory

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-004 QFR

Question Number: 4

Question: Your testimony states that DoD uses EPA's Lifetime Health Advisory to determine site-specific, risk-based cleanup levels and that sometimes the levels may be higher than EPA's Lifetime Health Advisory. a. I understand that EPA's Lifetime Health Advisory is not an enforceable limit, but it would justify a higher cleanup level?

Answer: Because a drinking water Lifetime Health Advisory (LHA) is unenforceable guidance, it cannot qualify as a cleanup standard under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). Instead, DoD incorporates the toxicity data from the PFOS and PFOA LHAs when conducting the CERCLA risk assessment process. DoD uses the toxicity data from the PFOS and PFOA LHAs in the standard CERCLA site-specific risk assessment process for drinking water exposures, to determine if there is an unacceptable risk to human health and cleanup actions are required. Once the need for cleanup is determined, CERCLA requires response actions to protect human health and the environment (i.e., address the unacceptable risks identified in the CERCLA risk assessment process). DoD will still take action based on unacceptable risks identified in the risk assessment, even if a federal cleanup standard, such as a drinking water Maximum Contaminant Level (MCL), does not exist.

QFR Title: Budgeting for PFAS Cleanup

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-005 QFR

Question Number: 5

Question: Your written testimony makes note of the fact that DoD included PFAS cleanup in the President's Budget in FY2018 and that now that DoD has created an initial inventory, the Agency can begin determining potential cleanup costs. a. Does this inventory only contain sites that have drinking water impacts? b. Does DoD plan to do a similar inventory for sites that may have contaminated soil, sediment, or groundwater?

Answer: a. DoD's inventory does not only contain sites that have drinking water impacts. b. DoD's inventory includes sites that may have contaminated soil, sediment, and groundwater.

QFR Title: Cooperative Agreements

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-006 QFR

Question Number: 6

Question: Can you walk through how the process of Cooperative Agreements with States work and why Cooperative Agreements are important to the cleanup process? a. Does DOD feel like the necessary legal authority is in place regarding Cooperative Agreements? b. What is the States' role in the process under a Cooperative Agreement?

Answer: Under the Defense Environmental Restoration Program statute, DoD has the authority to enter into agreements with State Agencies to reimburse the agency for that agency's activities related to DoD's cleanup program. These activities include, but are not limited to, reviewing documents and assessing cleanup progress. The program is titled: the DoD and State Memorandum of Agreement (DSMOA) program and the goal is to support and expedite DoD cleanup. After signing a DSMOA with DoD, a State must apply for and be awarded a cooperative agreement in order to obtain financial reimbursement for its eligible activities.

QFR Title: Defense and State Memorandum of Agreement (DSMOA) Program

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-007 QFR

Question Number: 7

Question: How does the Defense and State Memorandum of Agreement (DSMOA) program fit into DoD's process with respect to addressing PFAS contamination? a. Does DoD feel that there are any legal impediments for reimbursing States for their work on PFAS under the DSMOA program?

Answer: DoD does not see any legal impediments to reimbursing States for their work on PFAS under the DoD and State Memorandum of Agreement (DSMOA) program. Under the Defense Environmental Restoration Program statute, DoD has the authority to enter into agreements with State Agencies to reimburse the agency for that agency's activities related to DoD's cleanup program, regardless of contaminant. These activities include, but are not limited to, reviewing documents and assessing cleanup progress.

QFR Title: Coordination with EPA and Local Governments

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-008 QFR

Question Number: 8

Question: What has DOD done to coordinate the Department's efforts with EPA and local governments regarding the issues associated with the PFAS chemicals?

Answer: Throughout the cleanup process, DoD works in concert with regulatory agencies and communities, and shares information in an open and transparent manner. When elevated levels of PFOS and PFOA are detected that may pose an unacceptable risk to human health, DoD uses a proactive outreach strategy to promptly notify potentially affected community members. Outreach efforts may include: • Communicating information (e.g. status of investigations, cleanup progress) and partnering with local regulatory and governmental organizations to reach stakeholders; • Hosting public meetings; • Alerting and engaging with the media; • Messaging through community social media; and • Updating community leaders.

QFR Title: Assessment Technologies

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-009 QFR

Question Number: 9

Question: How does the Department ensure it is using the most appropriate assessment technologies?

a. Given the increased sensitivity of detection methods, what is your experience with increased detection at military bases? b. How does DOD communicate risk to the families and area communities?

Answer: To ensure the appropriate assessment technologies are utilized, the DoD requires drinking water sampling and analysis meet the requirements of EPA Method 537. For matrices other than drinking water, there currently are no EPA sampling and/or analysis methods for PFAS. In lieu of published EPA sampling methods, the DoD developed guidance (“Bottle Selection and other Sampling Considerations When Sampling for Per- and Poly- Fluoroalkyl Substances (PFAS)”, <https://www.denix.osd.mil/edqw/home/what-s-new/unassigned/edqw-pfas-sampling-factsheetrev-1-2-july-2017/>) and has followed industry best practices. To ensure the data collected is consistent and meets program requirements, DoD established method requirements for analysis of PFAS in matrices other than drinking water in the DoD Quality Systems Manual for Environmental Laboratories (DoD QSM): <https://www.denix.osd.mil/edqw/documents/documents/qsm-version-5-1-1-final/>. Laboratories performing PFAS analysis for the DoD in these matrices are accredited under the DoD Environmental Laboratory Program (DoD ELAP): <https://www.denix.osd.mil/edqw/accreditation/home/>). a. DoD has consistently used EPA Method 537 for drinking water and the requirements stated in the DoD QSM for all other matrices, there has not been an increased sensitivity of detection methods. b. Throughout the cleanup process, DoD works in concert with regulatory agencies and communities, and shares information in an open and transparent manner. When elevated levels of PFOS and PFOA are detected that may pose an unacceptable risk to human health, DoD uses a proactive outreach strategy to promptly notify potentially affected community members. Outreach efforts may include: • Communicating to potentially affected communities (e.g., notifying the resident of his or her personal drinking water results, fact sheets on installation web sites); • Partnering with local regulatory and governmental organizations to reach stakeholders; • Hosting public meetings (e.g., Restoration Advisory Board meetings); • Alerting and engaging with the media; • Messaging through community social media; and • Updating community leaders.

QFR Title: Emerging Contaminants

Requestors: Rep John Shimkus

Witness: Sullivan, Maureen

QFR ID: HECC-01-010 QFR

Question Number: 10

Question: Please explain how the Department is addressing emerging contaminants, such as PFAS, with respect to environmental cleanups?

Answer: The Department addresses emerging contaminants like any other contaminant under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

IFR Title: Studies on Chemical Safety

Requestors: Rep Frank Pallone

Witness: Sullivan, Maureen

IFR ID: HECC-01-001 IFR

Insert #: 1

Insert: Can you provide the committee with any and all studies that the Department of Defense has regarding the safety of these substitute chemicals?

Answer: To date, the Department has not conducted studies regarding the safety of substitute chemicals. As part of our research and development proposals, we are requiring the investigators to include an assessment of the human health and environmental impacts of proposed substitutes and byproducts.

IFR Title: Partnerships in Texas

Requestors: Rep Gene Green

Witness: Sullivan, Maureen

IFR ID: HECC-01-002 IFR

Insert #: 2

Insert: Has there been a partnership with the military bases in Texas and the Department of Defense?

Answer: Yes, DoD partners with communities around military bases in Texas throughout the cleanup process. Generally, DoD does this as part of a Restoration Advisory Board (RAB). RABs are a stakeholder group that meet on a regular basis to discuss cleanup at a DoD installations and are established and maintained when there is sufficient and sustained community interest. RABs provide a forum for local community input and ensure interested individuals from the community have an opportunity to thoughtfully participate in the decision making process of cleanup in a timely manner.