

AFFF Replacement Actions Meeting

Meeting Minutes

22 June 2016

DLA - HQ

Introductions

- See attendee list at end of minutes.
- Discussion topic and topic leaders are listed below.

Objective (Mr. Paul Yaroschak, OASD(EI&E))

- Objective: Removal of AFFF formulations containing C8 or longer chain fluorocarbons from the inventory to limit DoD liability for possible future releases. Use a phased approach to remove containers of legacy AFFF containing PFOS from inventory at DLA depots and the Services' installations followed by additional actions to determine if mixtures in fixed-based systems, fire-fighting, hangars, and ships should be removed.
- Background:
 - Due to their high environmental persistence, bioaccumulation potential, and potential toxicity, long-chain ($\geq$ C8) per and polyfluoroalkyl substances (PFASs) are the immediate focus of Department wide phase-out and transition efforts associated with military-specified AFFF products.
 - Pending the completion of testing of AFFF products on the DoD Qualified Products List (QPL), the near term goal is to procure only formulations that do not contain C8 (or longer) compounds. The C8 concentration will be measured only as PFOA in AFFF and PFOA should be non-detect (ND) in the product; however, the ND concentration may decrease as analytical methods improve.
- Defining terms:
 - AFFF containing PFOS – term used to describe the legacy foam, only manufactured by 3M, which contains PFOS. Use this term rather than “legacy-AFFF” because there are several legacy formulations of AFFF in the inventory that vary by manufacturing process (telomerization vs. electrochemical fluorination)

Manufacture Changes and Implications (Mr. Steven Fletcher, NAVSEA)

- All formulations of AFFF contain traces of C8 (or longer chain) fluorocarbons due to the manufacturing process. Even the new C6-based formulations contain very low levels of C8, or longer chain, fluorocarbons as impurities.

- Multiple AFFF products currently available on the QPL are claimed to be C6 based formulations by their manufacturers. The current MilSpec does not contain any requirement to govern or test for fluorocarbon chain length, so these claims are currently unsubstantiated.
- Dr. Jennifer Field at Oregon State University (OSU) is conducting analysis of old and new AFFF formulations to determine concentrations of specific PFASs (perfluoroalkyl substances).

Navy Update (Mr. Richard Mach, DASN(Environment))

- New policy from SECNAV released last week directed actions to prevent the uncontrolled release of AFFF for shoreside installations (with the exception of emergency response) and to remove and dispose of containers of AFFF containing PFOS from shore-supplied inventories for both shore and ships, by end of FY2017.
- The goal is to only remove and replace stocks of AFFF once.
- Proposed European Union REACH regulations will require manufacturers to reduce concentrations of PFOA and PFOS in AFFF over the next 10 years.
- The DoD Environmental Data Quality Workgroup is working to develop a process for commercial laboratory certification and accreditation for the analysis of AFFF formulations.

MilSpec Update (Mary Hunstad, NAVSEA)

- NAVSEA is updating the MilSpec for AFFF for reasons other than the PFAS issue, and the update will take at least 12 months due to the specification revision process.
- The MilSpec is used as the basis for AFFF formulations being listed on the QPL and being purchased by DLA. The MilSpec requires the use of fluorosurfactants.
- Currently, AFFF that meets the MilSpec (regardless of C8 content) is procured by DLA as required under the terms of their contracts with the AFFF manufacturers or distributors. AFFF that meets the MilSpec is also procured via other sources (e.g., open purchase; ship/equipment acquisition contracts)
- NAVSEA will investigate the possibility of issuing a supplemental letter to the MilSpec that can be used by DLA to prevent C8 or longer formulations (as measured by PFOA) from entering the supply chain until such time that a revision to the MilSpec can be completed.
- Ultimate goal for the MilSpec is to incorporate specific classes of AFFF with decreasing concentrations of C8 (or longer) fluorocarbons; this is a similar approach to what was done for volatile organic compounds in shipboard coatings.

DLA Inventory Update (Lauren Colabelli, DLA Troop Support)

- DLA Troop Support is completing a review of all AFFF in inventory at DLA Depots. So far, 4 sites have been surveyed, and approximately 300 55 gallon containers of 3M 3% AFFF (PFOS containing) were located; no 6% 3M AFFF (PFOS containing) yet located. No old formulations of Chemguard 6% found. Two additional sites remain to be surveyed.
- The current DoD inventory is a mixture of older and newer AFFF formulations based on a review of the item numbers, with the majority of the AFFF being produced by Tyco, which is either labeled Ansul or Chemguard.
- New procurements and DoD Component orders for all four AFFF National Stock Numbers (NSNs) are “frozen” and orders will not be filled until the stock screening is complete and preferred formulations are identified.
- No new orders of AFFF will be accepted until testing of the Chemguard formulations are completed and preferred formulations are identified.
- The inventory of AFFF in Navy ships is unknown; a manual process of inspection will be conducted, when the Naval Advisory is issued. As 3M (PFOS containing) AFFF is identified, it will be segregated on the ship, then stored shoreside for eventual disposition.
- To avoid adverse impact to mission and safety if additional AFFF is required, the Military Services may procure AFFF through open purchase if necessary.

DLA Disposition Services (Steve Schneider, DLA)

- There are two items for disposal – parent material and rinsate. The preference for disposal is incineration at a RCRA permitted facility versus landfilling.
- DLA is determining disposition costs to include disposal, transportation, handling, and collection.
- A disposition contract for the Air Force is already advertised. Rather than have an enterprise-wide contract, service-specific contracts would be more efficient given the current status of the Air Force contract in the procurement process. The Air Force contract will include collection/disposal of rinsate and containers of AFFF concentrate.
- Installations that send containers of AFFF (cans or drums) to their local DLA hazardous materials collection office cannot be assured of incineration of the AFFF since the existing contracts do not include incineration. A centralized contract for AFFF disposal via incineration for each Service is most efficient.

Action Items:

- All Services take actions to remove legacy 3M AFFF containing PFOS. AF has actions underway. Army, Navy and Marine Corps to complete AFFF inventory and provide data required by DLA for disposal (e.g., location, quantity, POC).

- DLA to provide data template/spreadsheet for collection, consolidation, and disposal of AFFF containing PFOS to the Army, Navy and Marine Corps.
- NAVSEA will draft a supplemental letter to the MilSpec that can be used by DLA to prevent procurement of C8 or longer formulations (as measured by PFOA). Letter requires NAVSEA legal and technical staffing to determine feasibility. Estimated completion in 3 weeks.
- DLA to determine if AFFF products that have ND concentrations of C8 fluorocarbons can be designated as “environmentally preferable” in the DLA supply system (i.e., designate with Environmental Attribute Codes (ENACs)).
- Reschedule a follow-up meeting for August to review AFFF testing data and progress. Date to be determined depending on progress of testing performed at OSU.
- Collect information from the Canadian Armed Forces on studies on effectiveness of draining and flushing AFFF from aircraft rescue and firefighting vehicles.
- OASD(EI&E) will track action items and progress.

Attendees:

In Person:

Mr. Paul Yaroschak, OASD(EI&E)
Mr. Drew Rak, Noblis, supporting OASD(EI&E)
Mr. Robbie Pirir, DLA
Mr. Richard Mach, Navy
Ms. Nannette Werner, DLA
Ms. Lindsay Nehm, Navy
Mr. Bruce Nelson, DLA
Mr. Jim Rudroff, Navy
Ms. Gunarti Coghlan, Navy
Mr. Dan Berkoski, Navy
Mr. Steven Fletcher, Navy
Mr. Kevin Kivimaki, DLA
Mr. Donald Martin, DLA
Ms. Gee McNease, DLA
Mr. James Reed, DLA

Via Phone (incomplete listing):

Ms. Mary Hunstad, Ms. Wanda Holmes, Navy
Ms. Laurie Cummings, Red Horse, supporting OASD(EI&E)
Mr. Dan Kowalczyk, BAH, supporting Air Force SAF/IEE
Ms. Catherine Vogel, Noblis, supporting OASD(EI&E)
Dr. Kelly Scanlon, GWU, supporting OASD(EI&E)
Mr. Steve Schneider, DLA Disposition Services
Barry Smith, Lauren Colabelli, Tom Page; DLA Troop Support
Kevin Matlock, Air Force, AFCEC
Mr. Dick Ramsdell, Ms. Morgan Mchugh, Mr. Robert Durham, Army