

GAO Review of DOD Drinking Water Contaminants (100947) Follow-up Questions on AFFF Products

In our prior conversations with Navy officials, we have been told that DOD's AFFF MILSPEC calls for AFFF products to contain PFCs. Based on our review of the AFFF MILSPEC, it appears that the relevant language is as follows (from page 5 of the document): *"Concentrates shall consist of fluorocarbon surfactants plus other compounds as required to conform to the requirements specified hereinafter. The material shall have no adverse effect on the health of personnel when used for its intended purpose."*

1. Is the term "fluorocarbon surfactants" in the MILSPEC interpreted as synonymous with PFCs? If not, how is the term interpreted, and where in the MILSPEC does it require AFFF to contain PFCs?
2. To what extent has DOD/Navy considered revising the MILSPEC to remove the requirement for "fluorocarbon surfactants," provided the performance requirements of the MILSPEC could still be met?
3. We understand that the Air Force uses high-expansion foam in some of its hangars.
 - a. Is high-expansion foam subject to AFFF MILSPEC requirements, or is it subject to other requirements?
 - b. To what extent does high-expansion foam contain PFCs?

Navy officials have also told us there are currently no PFC-free AFFF products that meet the performance requirements laid out in the AFFF MILSPEC. We have reviewed the websites of some manufacturers that are on DOD's AFFF QPL, and it appears that some of those manufacturers (e.g., Solberg, ICL Performance Products) claim to sell firefighting foam products that may not contain PFCs (e.g., "fluorosurfactant-free" and "fluorine-free").

4. Has the Navy tested any available PFC-free firefighting foam products (or products that claim to be PFC-free) from these or other manufacturers to determine whether they can meet the performance requirements in the AFFF MILSPEC?
 - a. If so, what were the results?
 - b. If not, why has testing not occurred?
5. To what extent has the Navy funded (or plans to fund) any research into developing PFC-free AFFF products?
6. What implications, if any are known, would selecting a PFC-free firefighting foam product (or product that claims to be PFC-free) have on the current infrastructure and systems used to store and use AFFF?