

ROBERT P. CASEY, JR.  
PENNSYLVANIA

COMMITTEES:  
AGRICULTURE, NUTRITION,  
AND FORESTRY  
FINANCE  
HEALTH, EDUCATION,  
LABOR, AND PENSIONS  
SPECIAL COMMITTEE ON AGING  
JOINT ECONOMIC

# United States Senate

WASHINGTON, DC 20510

June 6, 2017

Mr. Peter Giambastiani  
Acting Assistant Secretary of Defense for Legislative Affairs  
1300 Defense Pentagon  
Washington, DC 20301-1300

Dear Mr. Giambastiani:

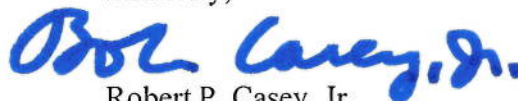
I write to request information about the Department of Defense's engagement with the industry that produces fire-fighting chemicals. For decades, military services have procured and used various forms of the chemical firefighting agent, Aqueous Film Forming Foam (AFFF). As you know, the use of AFFF has now been linked to contamination of the drinking water on and around Horsham Air Guard Station and the former Naval Air Station Joint Reserve Base Willow Grove in Pennsylvania and at other sites around the nation. My constituents deserve to know when the Department of Defense had information to suggest that the use of AFFF had adverse impacts on health and the environment.

Specifically, my office has been informed that at a 2001 meeting of the National Fire Protection Association, a letter from the Department of Defense was read to the attendees. The letter allegedly acknowledged that AFFF has persistent and bioaccumulative toxic effects.

I ask that you reply with an assessment of when DOD was aware of the adverse impacts of AFFF. I also ask for a copy of the letter described above, as well as any other relevant correspondence with the industry that supplied AFFF to the Department.

Thank you for your attention to this matter.

Sincerely,



Robert P. Casey, Jr.  
United States Senator



OFFICE OF THE UNDER SECRETARY OF DEFENSE  
3000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3000

ACQUISITION,  
TECHNOLOGY,  
AND LOGISTICS

JUN 30 2017

The Honorable Robert P. Casey, Jr.  
United States Senate  
Washington, DC 20510

Dear Senator Casey:

Thank you for your June 6, 2017, letter to the Acting Assistant Secretary of Defense for Legislative Affairs concerning Aqueous Film Forming Foam (AFFF). I am responding on his behalf.

As requested, we have enclosed the February 12, 2001, Department of Defense (DoD) memorandum that, based on our research, may have been referenced at a 2001 National Fire Protection Association meeting. The DoD memorandum is in response to the United States Environmental Protection Agency (EPA) proposed regulation, dated October 18, 2000, to potentially prevent the future production and import of 90 different perfluorooctyl sulfonates, including perfluorooctane sulfonates (PFOS), under the Toxic Substances Control Act (TSCA).

The 3M Company, which was the sole U.S. manufacture of PFOS, agreed to voluntarily discontinue manufacturing and the sale of PFOS by December 31, 2002. This raised concern within DoD since AFFF is critical for DoD firefighting capabilities and the military specification for AFFF allows for the use of PFOS.

At the time of the memorandum, DoD began discussing if potential substitutes were commercially available and effective for use in AFFF. At the same time, EPA expressed concerns regarding the toxicity, persistence, and bioaccumulative potential of PFOS; however, EPA acknowledged that the available data is limited and their accuracy uncertain.

We are continuing to remove and appropriately dispose of the 3M AFFF in the supply system and are testing existing and newer AFFF formulations to identify the most environmentally preferable substitute to meet our critical firefighting needs.

Sincerely,

James A. MacStravic  
Performing the Duties of  
Under Secretary of Defense  
for Acquisition, Technology,  
and Logistics

Enclosure:  
As stated



ACQUISITION AND  
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON DC 20301-3000

12 FEB 2001

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Aqueous Film Forming (AFFF) Workshop

We would like you to attend a one day workshop to discuss the impact of the U.S. Environmental Protection Agency's (U.S.EPA) proposed rule which has the potential to ban future production and import of perfluorooctyl sulfonates (PFOS) chemicals to the Department of Defense. The Mil Spec for AFFF allows the use of PFOS, perfluorooctanoic acid (PFOA), and telomers as foaming agents. The U.S.EPA released data this past year that indicates PFOS chemicals are persistent, bioaccumulating and toxic. PFOS has been found in the blood of the general US population, in wildlife, and in people overseas. The 3M Company, the sole United States producer of ninety PFOS chemicals, has chosen to discontinue their manufacture and sale of all uses globally by December 31, 2002, and substantially reduce their manufacture for the most widespread uses of these chemicals by December 31, 2000.

The U.S. EPA is evaluating PFOA and telomer chemicals as a substitute for PFOS. PFOA and telomer are also persistence in the environment and more toxic than PFOS. Because of this, they also may be subject to manufacturers' withdrawal from the market place (similar to 3M's action for PFOS) or future EPA rule making. AFFF is used in a number of critical life saving situations in DoD. Currently, there are no known substitutes that are as effective as the materials in the Mil Spec. We've asked the Air Force Research Laboratory, Materials and Manufacturing Directorate to present recommendations and discuss potential substitutes. We plan to discuss "high-risk" uses of PFOS and what should be done to reduce or eliminate environmental releases of PFOS. We will also determine if DoD should switched to PFOA or telomer instead of PFOS. We need a multi-disciplinary team to conduct this review and develop an AFFF replacement strategy.

The workshop will be held on March 16, 2001, from 0800hrs - 1630hrs, in the OSD Conference Center, 1E801, Room 4, Pentagon. We also requested the Defense Logistic Agency to brief DoD's uses of PFOS. Attached is the meeting agenda. My POC for this Workshop is 1 Lt Col Isaac Atkins, Director Occupational Health Policy, ODUSD (ES)/FP. He can be reached at (703) 604-1628, if you have any questions.

Curtis Bowling  
Assistant Deputy Under Secretary of Defense  
Force Protection

Attachment:  
As stated



## Aqueous Film Forming (AFFF) Workshop

### Agenda

Introduction (Overview)	Mr. Curtis Bowling
AFFF Environmental Issues	Dr. Doug Dierdorf, AFRL
Toxicity of PFOS, PFOA, Telomer	TBD, USEPA
Impact of AFFF Voluntary Production Ban on Army	TBD, DASA(ESOH)
Impact of AFFF Voluntary Production Ban on Navy	TBD, (E&S)
Impact of AFFF Voluntary Production Ban On AF	TBD, DASA(ESOH)
Overview of AFFF Uses and Impact to Fire fighting Operations	TBD, National Fire Protection Association
Impact AFFF Voluntary Production Ban On FAA	TBD, Federal Aviation Administration
PFOS Uses	TBD, Defense Logistics Agency
The Way Ahead	Workshop Members

**Distribution**

DASAF(ESOH)

DASN(E&S)

DASA(ESOH)

Defense Logistics Agency

AFRL/MMD

USEPA

Federal Aviation Administration

National Fire Protection Association