

## THE PENTAGON'S HISTORY WITH PFAS CHEMICALS

- 1960s:** With 3M, Navy develops AFFF firefighting foam containing PFOA and PFOS
- 1963:** Navy seeks AFFF patent
- 1966:** Navy granted patent
- 1967:** Navy use begins
- 1969:** Navy requires use
- 1974:** Navy report raises ecological concerns
- 1975:** 3M scientists informed of PFAS buildup in human body
- 1976:** Navy memo again raises ecological concerns
- 1976:** Navy suggests exploring risks of AFFF, alternatives
- 1976:** 3M finds PFAS chemicals in workers' blood
- 1976:** Navy memo cites 3M stonewalling
- 1978-79:** 3M studies, independent experts confirm risks of PFAS
- 1978:** 3M decides not to report risks
- 1980:** Air Force memo cites PFOA toxicity, begins research
- 1981:** Air Force study finds AFFF harmful to rats
- 1983:** Air Force study suggests cell damage
- 1985:** Second Air Force study again suggests cell damage
- 1989:** Animal deaths lead Air Force to contain spread of AFFF
- 1991:** Army Corps of Engineers deems AFFF hazardous
- 1991:** Corps of Engineers tells base to stop use
- 1996:** Navy study highlights AFFF toxicity, persistence
- 1997:** Army tells soldiers to treat AFFF as hazardous waste
- 1997:** Navy starts exploring alternatives to AFFF with PFOA and PFOS.
- 2000:** Military learns from EPA that 3M has stopped PFOS production
- 2000:** EPA alerts DOD about 3M studies showing health risks
- 2001:** Navy studies cite PFOA and PFOS bioaccumulation
- 2011:** DOD issues risk alert for AFFF
- 2015:** DOD begins transition from AFFF with PFOA/PFOS
- 2018:** Air Force completes transition from AFFF with PFOA/PFOS
- 2019:** Army scheduled to replace AFFF made with PFOA/PFOS
- 2020:** Navy scheduled to replace older AFFF formulations