

Questions:

Are you able to explain the attached excerpt from the PFAS report recently released for Richmond RAAF base (Detailed Site Investigation Report). It says that Ansulite from a foam drum was tested and returned a concentration of 400-562 ug/l for PFOA. I thought Ansulite only contained trace levels of PFAS?

Response to all:

As part of the detailed site investigation at RAAF Base Richmond, Defence tested samples from a drum of Ansulite (3%) concentrate which is diluted at a ratio of 3 parts concentrate to 97 parts water for application as a firefighting foam.

PFOS and PFHxS were not detected in the samples. An amount of PFOA was detected, at a concentration of 400-562 micrograms per litre, which is less than one part per million, or 0.00005 per cent. This level is consistent with anticipated process contamination from Ansulite manufacturing. It should be noted that the concentrate is significantly diluted with water when deployed. For example, if PFOA was detected at 500 micrograms per litre of Ansulite (3%) concentrate, it would be expected that when mixed according to the manufacturer's specification, there would be 15 parts per billion of PFOA in the deployable foam.

Defence uses Ansulite, or other suitable Class B foam products, in emergency situations where human life is at risk, or in controlled environments to test equipment. When conducting training exercises, Defence uses training foams which do not contain PFAS, or undertakes simulations without foam discharge. Any Ansulite used for testing is captured and treated and/or disposed of at licensed waste disposal facilities.

Ansulite was selected as the replacement firefighting foam product as it met Defence's capability requirements including international military specifications.

In 2005, a study was conducted by University of South Australia, CERAR to compare the toxicity, persistence, and bioaccumulation of Ansulite and 3M RF in laboratory test conditions. 3M Lightwater was included for further comparison. The report from this study found that Ansulite was the least toxic, least persistent and least bioaccumulative in comparison to 3M RF and 3M Lightwater. It was concluded that Ansulite was the safer product.

In 2012, a study was conducted by Cooperative Research Centre for Contamination Assessment and Remediation of the Environment (CRC CARE) to compare the toxicity, persistence, and bioaccumulation of Ansulite and Solberg in laboratory test conditions. The report from this study found that Ansulite was less toxic than Solberg to all test organisms used in the study. In general, it was found that Solberg was 10 times or more acutely toxic than Ansulite. Both Solberg and Ansulite were more or less equally persistent.

Defence is currently undertaking a review of firefighting foams that meet firefighting capability requirements, as well as environmental requirements. From this review, a transition plan will be developed to support Defence's shift to alternative firefighting foams.