

Questions:

1. Where are the traces of PFAS likely to have originated from?
2. Are these PFAS harmful to humans?
3. Defence has said eligible residents are being provided with alternative sources of drinking water.
 - a) Which residents/bases do not have a town water connection, and why?
 - b) How many residents (located in close proximity to the bases without town water connections who rely on bores, or who use a rainwater tank) are currently affected?
 - c) How is Defence providing alternative sources of drinking water? (Filters or bottles, for example?)
4. Does Defence have any advice about the safety of the water for showering and bathing?
5. Does Defence have any advice about the safety of the water for edible plants (fruit and vegetable gardens, for example)?
6. What prompted Defence's initial investigation into potential traces of PFAS in the water?

Response:

The 12 properties in the preliminary sampling program were selected because there is a history of using legacy aqueous film forming foam (AFFF) for emergency fire fighting situations and for fire fighter training at these locations. In 2004, Defence commenced phasing out its use of legacy AFFF containing PFAS as active ingredients. The AFFF now used by Defence is a more environmentally safe product.

Preliminary sampling was intentionally limited to accessible and relevant groundwater and surface water sources. The average was 7 samples per location. The purpose was to get an initial snapshot only, in order to inform future investigation work.

PFAS was detected on, and/or in the vicinity of all 12 properties. As such, all properties will be subject to a detailed environmental investigation conducted in accordance with the National Environmental Protection (Assessment of Contaminated Sites) Measure (NEPM) framework.

Most people living in developed nations will have levels of PFAS in their body as these compounds have also been used in common household and industrial applications. According to the Environmental Health Standing Committee (enHealth) Guidance Statements on PFAS, released in June 2016, there is currently no consistent evidence that exposure to PFAS causes adverse human health effects. However, because these compounds persist in humans and the environment, enHealth recommends that human exposure is minimised as a precaution.

Defence is not an authority on public health or ecological issues. The provision of advice on these matters is the role of respective federal, state and local government authorities. Advice on this issue should be sought from the NSW Department of Health (www.health.nsw.gov.au) or the NSW EPA (www.epa.nsw.gov.au).

Defence has adopted a precautionary approach and is providing alternative sources of drinking water to eligible residents located in close proximity to the 12 Defence properties who do not have a town water connection, and rely on the use of a bore for drinking water. Defence will also provide water to residents if drinking water is sourced from a rainwater tank that contains, or has in the past contained, bore water.

Defence provides either 600ml bottles or 10L containers of water, or refills eligible residents' rainwater tanks with potable water.

No residences in proximity to Holsworthy Barracks or RAAF Base Richmond are currently receiving alternative drinking water from Defence.

PFAS are generally present in aqueous film forming foam (AFFF). AFFF is a fire-fighting foam that has been used extensively worldwide, and within Australia, from about the 1970s by both civilian and military authorities, due to its effectiveness in extinguishing liquid fuel fires.

Older formulations of AFFF contained a number of PFAS that are now known to be persistent in the environment and in humans. The PFAS of interest include perfluorooctane sulfonate (PFOS); perfluorooctanoic acid (PFOA); and perfluorohexane sulfonate (PFHxS).

Response provided to journalist
22 November 2016

As well as firefighting foams, PFAS have had many uses in common household and industrial applications. These include stain resistant applications for furniture and carpets, fast food or packaged food containers, make up, personal care products and cleaning products.

From 2004, Defence commenced phasing out its use of legacy AFFF containing PFOS and PFOA as active ingredients. The AFFF now used by Defence is a more environmentally safe product. Further, Defence has made changes to the way it uses AFFF to ensure that the risk of releasing AFFF into the environment is minimised.

Response provided to journalist
22 November 2016