

Response provided to journalist  
14 December 2018  
RAAF Base Williamtown Investigation and Management

**Statement:**

In 2012, knowledge about PFAS chemicals was evolving. As a result, Defence followed the standard nationally accredited processes in conducting contamination investigations. Based on the knowledge we have gained since 2012, we have adapted our practices for PFAS environmental investigations over the past three years. This has included ensuring early engagement with the local communities around the bases when commencing PFAS Detailed Site Investigations.

Defence is committed to being open and transparent about its environmental investigations, management and remediation efforts at PFAS-affected Defence bases and in communities.

Defence engages with members of the Williamtown community through several channels on a regular basis. In addition to public community events such as information sessions and walk-in sessions, Defence continues to work with members of the community through a dedicated hotline, as well as through Regional Liaison Officers.

Defence acknowledges that the Williamtown community are concerned about how PFAS may affect them and is committed to provide support and assistance to those affected.

While it is known that PFAS can persist in humans, animals and the environment, there is no consistent evidence that PFAS are harmful to human health. However, as this possibility cannot be excluded, the Environmental Health Standing Committee (enHealth) recommends that exposure be minimised wherever possible as a precaution while research into any potential health effects continues.

As a precautionary measure, Defence has been providing alternative drinking water to residents who use bore water for drinking purposes. Defence's primary goal is to ensure that all residents within the Williamtown Management Area have access to a

sustainable source of drinking water, connecting eligible residents to town water where possible.

Defence appointed a Senior Defence Liaison Officer and the Department of Human Services appointed a Community Liaison Officer to provide community support. The officers have been supporting community engagement, linking residents with Commonwealth support services and providing local coordination with New South Wales government authorities.

To supplement existing Government-funded mental health services, additional resources has been provided to the local Primary Health Network to deliver additional face-to-face support services to individuals experiencing distress, or those who have been diagnosed with a mental illness.

As part of the response to community concerns, the Government is funding a Voluntary Blood Testing Program in the Management Area at Williamstown and an epidemiological study to help authorities better understand the potential impacts of PFAS to human health. The program is being conducted by the Commonwealth Department of Health and includes pre- and post-blood test counselling to ensure people are provided with information on what the result means for them and their families.

The Australian Government has considered all available information relating to PFAS contamination, including site investigation results, community views, expert advice, and scientific data, and is responding to PFAS in a way that is consistent with the available evidence. Based on the knowledge and evidence available at this time, the Australian Government is not considering a land purchase program as a result of PFAS contamination.

As an emerging contaminant, the understanding of the behaviour and impacts of PFAS contamination on human health and the environment are still developing, including what concentrations of contamination in water and soil may give rise to concern. In some cases, site-specific risk management measures have been developed to minimise human exposures and protect the environment.

The Williamstown site is particularly challenging as it is surrounded by an interconnected network of drains, rivers, estuaries, reservoirs and coastal waterbodies, including Grahamstown Lake/Dam, Campvale Drain, Tilligerry Creek Estuary, Port Stephens, Fullerton Cover, Hunter River Estuary and the Pacific Ocean.

The site is characterised by two interconnected sand aquifers. The water levels of these aquifers fluctuate markedly, with the aquifers often rising to the surface in various locations on and around the site.

Due to the highly permeable soils and shallow groundwater table surface water and groundwater can interact. These factors complicate PFAS management strategies across the site.

Defence has undertaken a range of PFAS management activities at Williamstown with the aim of breaking potential PFAS exposure pathways, including the excavation of sediment from on-base drains, excavation of a PFAS source area and implementation of groundwater treatment technologies.

The science of PFAS impacts and technologies for managing PFAS are constantly evolving. Remediation technologies are at various stages of research and development – they are, for instance, currently more advanced in the treatment of water than for soil.

Water is the primary method of PFAS contamination transferring from a source to a receptor, such as a person, animal, plant or a water body. PFAS is reasonably soluble in water and can rapidly leach through soils or disperse in waterways, travelling long distances.

As at 28 November 2018, Defence treated over 1.4 billion litres of water through four water treatment plants across RAAF Base Williamstown. Production of another water treatment plant is underway, and it is expected to be operational in early 2019.

The water treatment plants capture surface water and groundwater before it is able to migrate off-base, and treat it to a level below the limit of reporting for PFOS and PFOA.

As part of a long-term and precautionary measure for the supply of drinking water, Defence funded Hunter Water to provide property owners in the Williamstown Management Area access to the Hunter Water Supply Network, under the Williamstown Water Reticulation Project.

The Project included the installation of new water mains infrastructure and plumbing connections from the water mains to private properties for domestic use. Approximately 350 properties are expected to be connected under the Project.

Additionally Defence is covering service fees and water usage costs for eligible properties in the Williamstown Management Area for a period of three years.

In January 2018, Defence completed approximately three kilometres of drain maintenance, with a total of 996.3 tonnes of contaminated sediment and vegetation removed to a licenced facility in accordance with State government legislation.

In October 2018, Defence excavated over 6000 cubic metres of soil from the former Fire Training Area, an identified PFAS source area. The area has been backfilled and vegetation will be reinstated.

Defence engaged Umwelt (Australia) Pty Ltd to complete a regional drain network assessment on and in the vicinity of RAAF Base Williamstown. Both Fullerton Cove and Tilligerry Creek catchment areas are included in the assessment.

The study found that, where engineering options were analysed, only marginal improvements in drainage network performance could be predicted. Defence continues to work closely with the NSW Environment Protection Agency, Office of Environment and Heritage and Port Stephens Council to progress management actions offsite.