Australian Government
Department of Defence

Exmouth Region Investigation - Community Newsletter

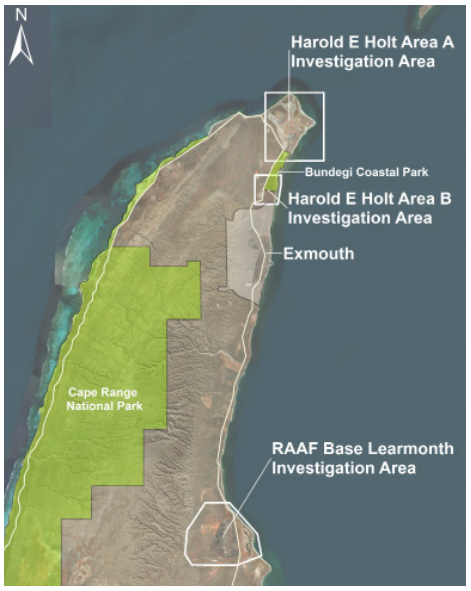
PFAS Investigation and Management Program

Background

In September 2017, Defence engaged an independent environmental consultant, GHD, to conduct a detailed environmental investigation into per- and polyfluoroalkyl substances (PFAS) on, and around, Naval Communication Station Harold E Holt Area A and Area B and RAAF Base Learmonth.

The Bases historically used legacy firefighting foams containing specific types of PFAS, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), as active ingredients. In 2004, Defence commenced phasing out its use of legacy firefighting foams containing PFOS and PFOA as active ingredients. Defence has since transitioned to foams with more environmentally safe products.

According to the Environmental Health Standing Committee (enHealth) Guidance Statements on per- and polyfluoroalkyl substances, there is currently no consistent evidence that exposure to these PFAS causes adverse human health effects. However, because PFAS compounds persist in humans and the environment, enHealth recommends that human exposure is minimised as a precaution. Defence is taking a precautionary and proactive approach to investigate, and manage PFAS contamination.



Investigation aims

- Identify the nature and extent of PFAS contamination resulting from legacy firefighting foam use at Harold E Holt Area A and Area B and RAAF Base Learmonth
- Understand any potential exposure risk to people, plants or animals

The investigation is being undertaken in accordance with:

- The PFAS National Environment Management Plan
- The National Environment Protection (Assessment of Site Contamination) Measure 1999

This staged process includes:

- Preliminary Site Investigation (PSI)
- Detailed Site Investigation (DSI)
- Human Health and Ecological Risk Assessment (HHERA), (if required)

The best management and remediation options for a particular site are determined by site-specific factors, including hydrogeology, the type of contamination, and access. At the end of the investigations, Defence will use the findings to develop a PFAS Management Area Plan (PMAP) that is tailored to the unique conditions of the Exmouth region.

Sampling in Exmouth

Investigation update

The Preliminary Site Investigation (PSI) has been completed and the first round of sampling to support the Detailed Site Investigations (DSI) was completed in March 2018. The second round of sampling commenced in June.

The DSI will focus on sampling and analysing PFAS in:

- Groundwater (sampled from bores)
- Surface waters (including the base drains and the water bodies they run into)
- The marine environment, including biota (plants and animals), and groundwater seepage samples, where groundwater discharges along the coast

So far, our intensive sampling on, and around, the bases has included:

- Collection of 227 groundwater samples, including installation of 102 new groundwater monitoring wells
- Soil sampling, including analysis of more than 1,100 samples from 583 locations
- Analysis of more than 330 soil, sediment and surface water samples from 195 locations
- Sampling from potable supply bores
- Sampling from base-grown produce