

<b>Safety Bulletin No.</b>	<b>2020 / 06</b>	<b>Date Issued</b>	14 May 2020
<b>Subject</b>	<b>PFAS at DIA</b>		
<b>Area of Concern</b>	PFAS - Potential Impacts and Controls		
<b>Issued By</b>	Nick Fewster – Environment and Sustainability Manager		

## Overview

PFAS contamination at DIA predominantly originates from the Darwin RAAF Base and is related to the historic release of firefighting foams used in training drills and in emergencies. PFAS contamination has the potential to impact human and environmental health. The management of soil, groundwater and construction activities at DIA supports risk management in relation to PFAS contamination.

## What is PFAS and why is it of concern?

PFAS stands for *per & poly-fluoroalkyl substances*, these are manufactured chemicals used in products that resist heat, oil, stains and water. The chemicals have been used in Australia and around the world in many common household products. PFAS is a concern, because these chemicals are highly mobile and persist in the environment.

## Where is the PFAS contamination at DIA?

PFAS contamination varies greatly across the airport lease area in both soils, stormwater and groundwater.

Soil contamination at DIA is generally low and categorised as 'acceptable for residential use' within the PFAS National Environmental Management Plan (NEMP), version 2 – 2020. However, elevated levels of PFAS contamination are present at sites where there has been the historical release of firefighting foam. These sites include:

- Airservices Fire Station,
- Airservices Hot Fire Training Ground and
- Bushland area to the south of the Airservices Hot Fire Training Ground.

Groundwater across the DIA lease area has variable levels of PFAS contamination.

## What activities pose a higher risk for PFAS contamination?

Higher risk activities include construction and maintenance activities where:

- Excavation works may reach groundwater.
- Soil excavations occur at source contamination sites (eg. adjacent the fire station, adjacent the fire training ground).
- Works occurring adjacent to, or within, stormwater channels with pooling water.

## How do we manage PFAS contamination during high risk activities?

All excavations within the airport lease area are required to undertake a PFAS risk assessment to manage environmental risk and to protect human health. If an activity has the potential to contaminate the environment then management measures are undertaken in consultation with the NT Airports Environment and Sustainability Manager. If the area is deemed high risk to worker safety, precautions are undertaken including the use of PPE to avoid inhalation of dust and to avoid dermal contact with groundwater and soils.

## Does the DIA airside stockpile area contain high levels of PFAS?

Under PFAS regulations, DIA is required to classify stockpiled soils according to PFAS contamination levels. An assessment of our stockpile area undertaken in 2018 indicated that the highest levels of PFAS fell within the PFAS NEMP guideline for 'public open space'. All stockpiling of soil is risk assessed as having relatively low levels of contamination prior to being stockpiled.

## How contaminated is Rapid Creek?

The RAAF Base Darwin Human Health Risk assessment undertaken by Coffey Consultants in 2018 provides the following information in relation to activities at Rapid Creek.

- Recreational water use, including swimming, was assessed as a low and acceptable risk within Rapid Creek.
- Consumption of fish from the freshwater section of Rapid Creek (east of Trower Road) presents an elevated exposure risk.

## What is being done about PFAS contamination?

Firefighting foams used and stocked by Airservices were changed over from foams containing PFAS to PFAS free foam in 2019. PFAS contamination levels in the environment will decrease over time as Defence undertake their planned remediation works at impacted sites across DIA and Darwin RAAF Base.



*Dry season groundwater flows at DIA, adjacent Charles Eaton Road.*

For further enquiries about PFAS contamination at DIA please contact:

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