PFAS – Norfolk Island Fact Sheet

Background

Elevated levels of per- and poly-fluoroalkyl substances (PFAS) have been detected in water samples from three sites on public land within the headwaters of the Mission Creek catchment directly below the aviation fire services training drill ground, adjacent to Norfolk Island International Airport.

About per- and poly-fluoroalkyl substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS) are manufactured chemicals used in a wide range of industrial and household applications globally. Some types of PFAS have been used in fire-fighting foams, particularly at places like airports, fuel storage facilities, and Defence bases, because they are very effective at extinguishing liquid fuel fires.

PFAS were also used across Australia and internationally in a range of common household products and specialty applications, including in the manufacture of non-stick cookware; fabric, furniture and carpet stain protection applications; food packaging and in some industrial processes. As a result, most people living in the developed world will have levels of PFAS in their body.

PFAS are emerging as a concern around the world because they are persistent and highly mobile in the environment.

Currently there is limited evidence of significant impacts on human health from exposure to PFAS chemicals. Research in Australia and overseas continues to be undertaken.

Next steps

These three initial sample results were collected by the CSIRO on public land as part of the Norfolk Island Water Resource Assessment project. While samples were being collected to assess general water chemistry for the project, PFAS testing was included to determine any water or soil contamination. The Department of Infrastructure, Transport, Cities and Regional Development (the Department) is now commencing an environmental investigation, which will include a Human Health Risk Assessment (HHRA) for Norfolk Island. This will identify the nature and extent of PFAS in the local environment (including soil, sediment, surface water and groundwater) related to the historical use of firefighting foams at Norfolk Island International Airport, and any potential exposure risks to people or the environment.

We commit to working closely with Norfolk Island Regional Council and the community as we gather further information to determine how this needs to be managed. We will keep the community informed and engaged at every step.

Using groundwater for drinking

As a precaution, the Department recommends not drinking water from any underground or creek sources within the Mission Creek catchment around the airport or using bore water taken from that catchment to re-fill rainwater tanks that supply drinking water, until further notice.

The Department will ensure those people in nearby properties whose water supply will require further testing have access to alternative drinking water supplies. Landholders and residents within the investigation area, who use groundwater for drinking water or household use, should contact the Department to discuss possible management strategies. Each household's drinking water requirements will be assessed on a case-by-case basis to select the most appropriate assistance.

About the environmental investigation, including the Human Health Risk Assessment

The Department is undertaking an environmental investigation and assessment of the groundwater including targeted sampling and testing of local water bores. We are exploring expansion of the CSIRO water project to ensure sampling and testing commences as soon as possible. It is anticipated the investigation will take a number of months to complete. The purpose of the investigation is to understand how groundwater may have been impacted by legacy fire-fighting foams containing PFAS, used as part of training activities. The information collected will assist the Australian Government to understand the groundwater impacts and contribute to developing appropriate management strategies in relation to any potential human health and ecological risks.

Investigations are undertaken by independent and experienced environmental services providers and are done in accordance with the National Environmental Protection (Assessment of Site Contamination) Measure (NEPM) framework and PFAS National Environmental Management Plan (NEMP).

The investigation will include:

• sampling and analysis of soil, sediment, surface water and groundwater to identify PFAS exposure in the vicinity

• identifying pathways and receptors of PFAS. A 'receptor' is a person or thing (e.g. plant or animal) that can be exposed to these compounds. A 'pathway' is the way in which they can be exposed (e.g. drinking water or eating food containing these compounds);

• community and stakeholder engagement, including a water-use survey

• a Human Health Risk Assessment, which will evaluate potential risks to the human population and ecology, and inform future action to mitigate risks.

Investigation outcomes

When environmental investigation reports are finalised and publicly released, the Government will consult with residents, businesses and local stakeholders on the findings.

The Australian Government takes this environmental investigation very seriously and is committed to implementing appropriate management responses based on the advice of independent scientific experts in this field.

Government guidance

The Australian Government, led by the Department of Environment and Energy, has developed a comprehensive whole-of-government response to PFAS contamination and is working to prevent or reduce environmental and human PFAS exposure wherever possible. For more information on this and on PFAS generally, visit PFAS.gov.au

On 7 May 2018, an independent expert health panel concluded there is mostly limited, or in some cases no evidence, that human exposure to PFAS is linked with human disease. The panel also advised that the evidence does not support any specific health or disease screening or other health interventions for highly exposed groups in Australia, except for research purposes; and decisions and advice by public health officials about regulating or avoiding specific PFAS chemicals should be mainly based on scientific evidence about the persistence and build-up of PFAS.

The Panel's Report is available at https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas-expert-panel.htm

Support

The Department will rely on Department of Health advice and the enHealth Guidance Statements available on the Department of Health website.

Accordingly, it has adopted a precautionary approach and is providing alternative sources of drinking water to eligible residents located in close proximity to the initial investigation area.

Residents are welcome to contact the Department's on-Island team on 23315 or NIPFAS@infrastructure.gov.au to discuss eligibility for water assistance and possible management strategies. Each household's drinking water requirements will be assessed on a case-by-case basis.

Keeping the community informed

The Department is committed to regularly updating the community throughout the investigation. The Department website will be updated as the investigation progresses. Community information sessions, direct mail and information sheets will occur as needed. Enquiries or requests relating to individual properties will be assessed on a case-by-case basis.

Where can I get more information?

https://www.pfas.gov.au/

https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas.htm#pfas