PFAS FACT SHEET

BYRON BAY

October 2022

Byron Bay PFAS Investigations

Fire and Rescue NSW (FRNSW) will undertake an environmental survey and sampling program at and around the Byron Bay Fire Station. Initially this will involve a water use survey of a small number of registered bores to the east of the site. Groundwater wells will then be installed around the Byron Bay Fire Station to determine groundwater flow direction and identify if there is any potential offsite impact.

Once these results are known, FRNSW will work with the New South Wales Environment Protection Authority (NSW EPA) to determine any next steps required based on the outcomes of these investigations.

Background:

In 2021 Byron Shire Council undertook a PFAS investigation at the Butler Street Reserve, Byron Bay, after detecting PFAS within groundwater and the adjacent drain. Butler Street Reserve was formerly used as an unlicensed landfill until the mid-1970s and is considered a legacy contaminated site.

As part of Council's investigation, the NSW EPA and Byron Shire Council undertook a water use survey and sampled registered bores in the general vicinity of the Butler Street Reserve. This water use survey was to increase understanding of local groundwater use and to determine if PFAS was present in groundwater.

The NSW EPA is now seeking to determine whether there are any other potential sources of PFAS in the local area beyond the known contamination at the Butler Street Reserve.

FRNSW is working with the NSW EPA and proactively undertaking an environmental survey and sampling program at and around the Byron Bay Fire Station to assist in these further investigations.

FRNSW PFAS Environmental Program

FRNSW commenced an Environmental Program in 2016 to investigate and manage the potential presence and impacts of PFAS on, and in the vicinity of, it sites.

This program was developed in consultation with the NSW EPA and includes a number of FRNSW training sites and offsite locations across NSW where historically used firefighting foams containing PFAS were stored and used.

The NSW EPA monitors the progress of FRNSW PFAS investigations and coordinates any precautionary advice for the community in the event this is required.

What are PFAS?

PFAS (per- and poly-fluoroalkyl substances) are a group of manufactured chemicals that include perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) and perfluorohexane sulfonate (PFHxS). PFAS are very stable chemicals that do not easily break down and can persist in the environment.

PFAS compounds have been used in the manufacture of many common household and industrial goods as shown in Figure 1, as well as historically in certain types of firefighting foams.

These household goods include, but are not limited to, stain resistant applications for furniture and carpets, non-stick cookware, fast food or packaged food containers, make up, personal care products, paints and cleaning products.

Products containing PFAS are being phased out around the world. Due to their widespread use, and persistence in the environment, most people living in developed nations will likely have some level of PFOS and PFOA present in their bodies.

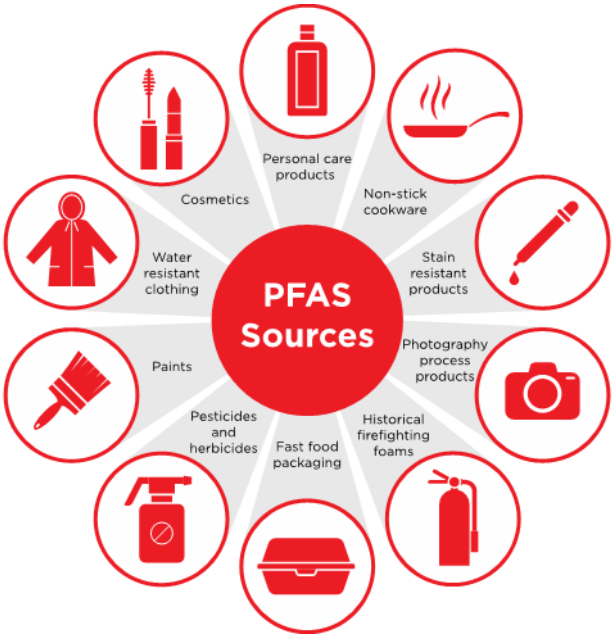

Figure 1: Common uses of PFAS

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PFAS and Firefighting Foam

Aqueous film forming foam (AFFF) was historically used as a firefighting foam extensively worldwide, including within Australia.

The use of AFFF by both civilian and military authorities as a firefighting foam commenced in the 1970s due to its effectiveness in extinguishing liquid fuel fires.

From 2007 FRNSW commenced phasing out its use of historically used AFFF containing PFOS and PFOA as active ingredients.

The firefighting foam now used by FRNSW does not contain PFAS.

PFAS and Human Health

FRNSW relies on guidance from the relevant health authorities and cannot provide health advice regarding PFAS.

Finding PFAS in the environment does not necessarily mean there is a human health risk. Expert advice released by the Australian Government in June 2019[1] states PFAS has not been shown to cause disease in humans and "probably has minimal impact on human health".

However, the Australian Government's PFAS Expert Health Panel recommends limiting exposure to PFAS as a precaution until further research into health effects is completed. The NSW Government adopts this precautionary approach to assess and limit exposure pathways to PFAS.

Typically, this approach means assessing and minimising human exposure pathways, such as the consumption of groundwater and home grown produce where threshold levels of PFAS are present.

Skin contact, inhalation (including dust inhalation), and incidental ingestion of PFAS impacted soil are not primary exposure pathways to PFAS.

For more information about PFAS, please contact NSW Health or the Commonwealth Department of Health.

PFAS Further Information

Further information about the FRNSW PFAS Environmental Program is available at: www.fire.nsw.gov.au/pfas

Information on the NSW Government PFAS Investigation Program being undertaken by the NSW EPA is available at: https://www.epa.nsw.gov.au/your-environment/contaminated-land/pfas-investigation-program

Information on PFAS health effects and exposure can be found on the Department of Health and Aged Care's website: https://www1.health.gov.au/internet/main/publishing.nsf/Content/ohp-pfas.htm

Contact the Project Team

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[1] The 2019 enHealth Guidance Statements and a fact sheet providing more information on PFAS and human health effects by the Department of Health are available at: enHealth guidance | Australian Government Department of Health and Aged Care