# National per- and polyfluoroalkyl substances (PFAS) Position Statement

## Parties

The parties to this National PFAS Position Statement are all Australian governments (Commonwealth, state and territory), as represented by Environment Ministers (where jurisdictions are signatories to the *Intergovernmental Agreement on a National Framework for Responding to PFAS Contamination*).

## Purpose

All Australian governments agree that further release of PFAS into the environment from ongoing use should be prevented where practicable, and that actions to reduce or phase out the use of PFAS should be nationally consistent.

The purpose of this Position Statement is to outline a nationally unified vision for reducing future PFAS use in Australia, so that governments and PFAS users (whether industry, businesses, manufacturers, regulators, or policy-makers) can work towards an agreed and clear set of objectives.

This Position Statement seeks to encourage discussion with industry and other stakeholders about how PFAS should be managed, including under the National Standard for Environmental Risk Management of Industrial Chemicals (National Standard). It does not, in itself, impose regulatory measures, time-frames or create mechanisms for controlling PFAS use.

## Rationale

PFAS are a group of over four thousand chemicals. Some PFAS are very effective at resisting heat, stains, grease and water, making them useful chemicals for a range of applications. Unfortunately, these properties also make them problematic in the environment. ‘Long-chain’ PFAS are of greatest concern, as they can be highly mobile in water (which means they travel long distances from their source-point); they do not fully break down naturally in the environment; they can build up in the bodies of animals and humans, and can be toxic to a range of animals. Two long-chain PFAS – PFOS and PFOA[[1]](#footnote-2) – are listed on an international agreement known as the 'Stockholm Convention on Persistent Organic Pollutants' because of these concerns. ‘Short-chain’ PFAS are also known to be highly mobile in water and not fully break down naturally in the environment.

While understanding about the human health effects of long-term PFAS exposure is still developing, there is global concern about the persistence and toxicity of these chemicals in the environment.[[2]](#footnote-3)

The *Intergovernmental Agreement on a National Framework for Responding to PFAS Contamination* (the PFAS IGA) fosters collaborative, nationally consistent approaches to managing PFAS contamination in the environment caused by historical use of these chemicals. It came into effect in February 2018. A review of the operation of the PFAS IGA in 2019 demonstrated that it provided a means for better cooperation between all the Parties to the Agreement in responding to existing contamination. However, it also highlighted a desire, from regulators, industry, and the public, for a nationally consistent approach to controlling ongoing use of PFAS in Australia.

Australian governments have determined that a Position Statement is the best way to communicate a nationally agreed stance on PFAS chemicals of concern, and the objectives for minimising release of these chemicals into Australia’s environment, ahead of more targeted and detailed consultation with users of PFAS and other stakeholders.

## Position Statement

**Australian governments agree the following objectives:**

* Ongoing sale or use of products (i.e. chemical based formulations) and articles (i.e. objects that contain chemicals) that contain long-chain PFAS[[3]](#footnote-4), for any industrial or commercial application[[4]](#footnote-5), should be phased out, in line with the Stockholm Convention.
  + Where a product or article is suspected of containing PFAS, information should be gathered to ascertain if it contains long-chain PFAS and it should then be managed accordingly.
* Transitioning away from the use of chemicals that cause irreversible or long-term contamination of Australia’s environment should be the ultimate goal for all users of PFAS in Australia.
  + Where short-chain PFAS[[5]](#footnote-6) are used in aqueous film forming foam (AFFF), they should only be used in emergency situations and in accordance with all relevant regulations. Any releases should be fully contained and wastes managed in accordance with the PFAS National Environmental Management Plan (NEMP).
  + Until effective and economically feasible non-PFAS alternatives are developed, the ongoing sale and use of products and articles containing short-chain PFAS may be necessary for uses for which no suitable and less hazardous alternatives are available.[[6]](#footnote-7)
  + Replacement chemicals should be degradable in the natural environment and not be bio-accumulative.
* Importers, sellers and users of chemicals should inform themselves about the presence of PFAS in products and articles, due to their potential negative environmental, health and socioeconomic impacts.
  + Entities that currently sell or use long- or short-chain PFAS are encouraged to develop a strategy that outlines their current uses, and how and when they will transition away from these chemicals.

## Supporting information

### International Context

Actions have been taken globally to reduce the environmental and human exposure to long-chain PFAS, driven by concerns about the spread and persistence of PFAS in the environment. For instance, major global manufacturers in OECD countries have voluntarily discontinued production of certain long-chain PFAS. In addition, the production and use of several long-chain PFAS and their precursors have been restricted under national, regional or international regulatory frameworks.[[7]](#footnote-8)

PFOS and PFOA[[8]](#footnote-9) are listed on the Stockholm Convention on Persistent Organic Pollutants. PFOS was listed in 2009. The Conference of the Parties agreed to list PFOA in 2019. The objective of the Stockholm Convention is to protect human health and the environment from Persistent Organic Pollutants (POPs). Chemicals listed under the Convention are subject to elimination or restriction, as well as waste management requirements. Of the 183 parties to the Convention, most have ratified the listing of PFOS, thereby committing to manage the chemical in accordance with the convention requirements.

Australia ratified the Convention on 20 May 2004 and chose to be an ‘opt-in’ party. This means that, unlike most other parties, Australia undertakes a domestic treaty making process to determine whether to ratify any amendments to the Convention, which includes any new chemicals listings. Australia is yet to ratify the listing of PFOS (or PFOA) under the Convention.

### PFAS management in Australia

Since 2002, the Australian Government National Industrial Chemicals Notification and Assessment Scheme (NICNAS) has published a number of alerts on PFAS. NICNAS has recommended that:

* Use of PFOS-based and related PFAS-based chemicals should be restricted to essential uses, for which no suitable and less hazardous alternatives are available
* Importers should ensure that alternative chemicals are less toxic and not persistent in the environment
* Stocks should be disposed of responsibly on expiry (in consultation with state and territory environment authorities), and
* All labels and material safety data sheets (MSDS) should include details of PFAS chemicals present in products.

A large body of work is underway across Australia - both to manage existing contamination and to increase our ability to prevent further contamination from PFAS and other industrial chemicals of concern.

Responsibility for regulation of industrial chemicals at each stage of their ‘lifecycle’ is shared across the Commonwealth, states and territories. The lifecycle of a chemical includes manufacture, import, export, use, disposal and destruction.

The *National Standard for Environmental Risk Management of Industrial Chemicals* (the National Standard) will set a nationally consistent environmental management approach for the use and disposal of industrial chemicals, including PFAS. The National Standard will be established by Commonwealth framework legislation, and implemented in regulatory frameworks in jurisdictions. Work on framework legislation to establish the National Standard is currently underway. The National Standard will also form part of a national legislative framework that would support the Australian government in deciding whether to ratify the listing of PFOS and PFOA (and any future listings) under the Stockholm Convention.

The PFAS National Environmental Management Plan (PFAS NEMP) is a nationally agreed document that sets guidance and standards for assessment and management of legacy PFAS contamination. The PFAS NEMP was first published in January 2018. Environment agencies in all jurisdictions will continue to work collaboratively to expand the PFAS NEMP over the coming years as the necessary scientific and technical work is completed, with a formal review due in 2023. The PFAS NEMP is included in the *Intergovernmental Agreement on a National Framework for Responding to PFAS Contamination*, as Appendix B.

### Communication and consultation

As outlined in the "purpose" section, this position statement is intended to encourage discussion with all stakeholders to determine sensible, practical, nationally consistent PFAS controls.

Public knowledge of the existence and potential harm of ‘PFAS’ continues to grow, but there is low awareness of the vast number and variety of chemicals captured in this group, their widespread uses, and the different levels of environmental impact resulting from their differing chemical structures. Many PFAS users may not be aware that their products or processes involve these chemicals.

The use of PFAS in applications other than fire-fighting foams is likely to contribute to environmental impacts. These other uses are broad ranging, and global information indicates that PFAS may be found or used in a wide range of products and articles, including (but not limited to):

* Cleaning products
* Cosmetics
* Food packaging
* Hydraulic fluids
* Metal and plastic etching
* Paints, lacquers and varnishes
* Paper treatments
* Photographic coatings
* Silicone rubber products
* Ski waxes
* Sports and outdoor clothing
* Upholstery and carpets

The Parties to this Position Statement recognise the importance of reaching out widely to industry to gain a better understanding of how PFAS are being used across Australia. Environment agencies in all jurisdictions are committed to working together to identify and engage with all stakeholders affected by any future regulatory action in relation to PFAS, to ensure future actions are realistic, pragmatic, and implementable.

## Definitions

**Articles:** Objects that have a particular shape, surface or design, and do not undergo a change in chemical compositions when used for their intended purpose. For example, a couch, rain jacket or piece of paper.

**Long-chain PFAS:** Perfluorosulfonates with six or more carbons, perfluorocarboxylic acids with seven or more carbons, and their precursors**[[9]](#footnote-10)**.

**Products:** Chemical products, generally a mixture of chemicals in liquid form, which may undergo a change in chemical composition when used for their intended purpose. For example, a cosmetic product, paint or stain-protector treatment.

**Short-chain PFAS:** Perfluorosulfonates with less than six carbons, perfluorocarboxylic acids with six or less carbons, and their precursors.

1. PFOS = perfluorooctane sulfonate, also known as perfluorooctane sulfonic acid; PFOA = perfluorooctanoic acid [↑](#footnote-ref-2)
2. For more detailed information on human health effects, please see the 2019 enHealth Guidance Statements for PFAS, available at: <https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-pubhlth-publicat-environ.htm> [↑](#footnote-ref-3)
3. See 'Definitions' section [↑](#footnote-ref-4)
4. Excludes medical and research applications. [↑](#footnote-ref-5)
5. See 'Definitions' section [↑](#footnote-ref-6)
6. To be defined in consultation with industry and other stakeholders. [↑](#footnote-ref-7)
7. Organisation for Economic Co-operation and Development (OECD) Portal on Per and Poly Fluorinated Chemicals: <http://www.oecd.org/chemicalsafety/portal-perfluorinated-chemicals/riskreduction/> [↑](#footnote-ref-8)
8. PFOS = perfluorooctane sulfonate, also known as perfluorooctane sulfonic acid; PFOA = perfluorooctanoic acid [↑](#footnote-ref-9)
9. Long-chain and Short-chain PFAS definitions derived from Synthesis paper on per and polyfluorinated chemicals Per- and polyfluorinated chemicals (PFCs) (OECD, 2013): <https://www.oecd.org/env/ehs/risk-management/PFC_FINAL-Web.pdf> [↑](#footnote-ref-10)