

General/overall comments

Fire Protection Association Australia (FPA Australia) welcomes the opportunity to provide a submission on this regulatory impact statement for the national phase out of PFOS which has been a substance in the formulation of some firefighting foams in the past. One of our core values is to protect the environment and in this instance due to the availability of next generation firefighting foams that do not contain PFOS we foresee no potential impact on life safety or risk to property from fire.

FPA Australia is a not-for-profit organisation with members in all Australian jurisdictions. Central to our vision is a focus on advocacy in order to influence change and deliver improved fire industry outcomes for the community. Our advocacy role includes promoting improvements in legislation, codes and standards which necessitates engagement with all states and territories and the federal government. Such advocacy is also complemented by development of our own guidance material; submissions to government inquiries and proposed legislative reforms; education and training services; and, the development of national accreditation schemes for individuals undertaking roles in the fire protection industry.

As the national peak industry body representing the fire industry we have numerous members who work with firefighting foams on a regular basis.

FPA Australia supports Option 4 of the RIS, 'Ratify and phase out all non-essential uses'. Although the fire protection industry have moved away from providing firefighting foam concentrate that may break down to or contain PFOS (PFOS foam), we would welcome legislation to prevent the use of PFOS foam and enforce its disposal to avoid environmental PFOS contamination from existing stocks on sites inline with the Stockholm Convention which recognised PFOS as a Persistent Organic Pollutant in 2009.

Where companies have replaced PFOS foam using an appropriate decontamination process it is possible that a low level of contamination of the replacement foam will occur. FPA Australia contends that to address these instances provisions should be implemented to protect such entities from being held accountable for associated PFOS contamination that is minor.

Option 4 of the RIS, 'Ratify and phase out all non-essential uses' appears to have the least financial impact and the best environmental outcome.

FPA Australia recommends an awareness campaign is implemented for industry sectors which may still hold stocks of PFOS foams advising them that they need to be removed from service and destroyed.

Industry needs clear guidance and direction and Australia should align with the convention. There are no barriers to this in the fire protection industry.

Please see attached our information bulletin 'IB06 – Selection and use of firefighting foams'.

Specific comments – please insert your specific comments below, listed against the part of the Consultation Regulation Impact Statement to which they apply

RIS reference:

[insert section number and title of relevant part of the Regulation Impact Statement]

Comments

7. Consultation, p.98	<p>'The capacity of industry to achieve the proposed PFOS phase outs, process improvements and waste disposal requirements, including destruction'</p> <p>FPA Australia Response</p> <p>The firefighting foam manufacturers no longer manufacture firefighting foams that contain PFOS or that have elements that can breakdown to PFOS (PFOS foams).</p> <p>Alternatives to PFOS foams that are adequate for firefighting have been available for many years, primarily as a result of the Stockholm Convention.</p> <p>Acceptable methods used for the disposal of PFOS foams include high temperature incineration or cement kiln destruction. The availability of adequate disposal facilities and controls on transportation of PFOS foams or PFOS foam solutions to those facilities often interstate should be considered.</p>
7. Consultation, p.98	<p>'Additional information that would help substantiate, or refine the accuracy of, the analysis of costs and benefits'</p> <p>FPA Australia Response</p> <p>The manufacturers of PFOS foams supplied in Australia ended production of such foams by 2004.</p> <p>However, stocks of PFOS foam may still exist out on sites for use in existing firefighting systems, in loose containers for use with fire responder equipment, as reserve firefighting supplies or held to avoid disposal costs. PFOS foams are unlikely to be retained by reputable fire industry suppliers except when the supplier has been engaged to dispose of the chemical.</p> <p>Key fire protection industry distributors have not supplied PFOS foams for over 10 years.</p> <p>Queensland and South Australia have implemented legislation that restricts the use of PFOS foams.</p> <p>We suspect sites still exist where PFOS foams are connected to fire suppression systems or stocked. This presents a significant environmental risk in a fire scenario when such systems are discharged and mixing of PFOS foams with fire water occurs multiplying the volume of contaminated liquid significantly. Foam solution is normally a 3% or 6% foam concentrate to water ratio when applied to control a fire. However, further dilution can occur due to other water sources or other chemicals such as fuels leading to large volumes of liquid which, when uncontained, may result in significant and persistent environmental damage.</p> <p>When PFOS foams are replaced and equipment such as storage tanks and pipework is not adequately decontaminated, the replacement firefighting foams can become PFOS contaminated leading to a significantly reduced concentration by volume of PFOS.</p>

High temperature incineration or cement kiln destruction are considered acceptable disposal methods for PFOS foams and PFOS foam solutions (foam solution mixtures range from a 1% to 10% PFOS foam concentrate ratio to water). Further diluting may occur if PFOS foam concentrate or PFOS foam solution is introduced into another liquid source.

High temperature incineration is currently estimated at \$0.85/kg for PFOS Foams and \$0.85/kg for PFOS Foam Solution.

Similarly, cement kiln destruction is currently estimated at \$0.85/kg for PFOS Foams and \$0.85/kg for PFOS Foam Solution.

The values above however do not include consultation costs, transport costs and existing equipment decontamination costs. We would therefore recommend the value of \$3.85/kg is used for the analysis.

PFOS foam on sites

PFOS foams that are located on sites will most likely be either stored as replacement firefighting foam stocks or quarantined PFOS foam, in 20L pails for use with fire hydrants or hose-reels, in firefighting vehicles and in tanks directly connected to firefighting foam systems.

Types of sites that may use foam or foam systems and therefore may have PFOS foam include but are not necessarily limited to the following:

- Petrochemical processing, storage or supply facilities
- Offshore platforms
- LNG facilities
- Seagoing vessels
- Ports
- Shipping terminals
- Airports
- Open cut and underground mines
- Chemical storage ware-houses
- Museums
- Paint factories
- Flammable and combustible chemical processing facilities
- Printing facilities
- Defence

Decontamination of equipment

We recommend thorough washing of all items that may have come into contact with PFOS foams. This will produce contaminated wash water that should be collected and sent for suitable disposal. To avoid contamination of replacement fire fighting foam we recommend effluent from the cleaning process nearing completion is sampled and confirmed as virtually PFOS free. However, it has proved very difficult to remove PFOS from contaminated equipment so it is likely some minor contamination of new firefighting foam will occur where existing equipment is reused.

<p>7. Consultation, p.98</p>	<p>‘For fire-fighting, information on the current import, use, storage and stocks of PFOS –contaminated fire fighting foams, including use in shipping’</p> <p>FPA Australia Response</p> <p>The following only considers the use of PFOS for the Fire Protection Industry</p> <p>PFOS foams are currently not being imported.</p> <p>PFOS foams currently on sites that may be used for firefighting or training are estimated to be significantly in excess of 56,000L. We have been made aware of the possibility that 56,000L is still on sites but suspect there is much more in the field that we have not been informed about or have any data available to identify.</p> <p>PFOS foams currently in stock for distribution to end users in Australia are estimated at zero.</p> <p>Many sites store a 100% backup supply of foam concentrate so we suspect PFOS foams may be stored as backup supplies on some sites.</p>
<p>4. What are Australia's options for the phase out of PFOS?, Table 7, p.58 & 59</p>	<p>‘Option 1: No new policy intervention’</p> <p>FPA Australia Response</p> <p>We <u>do not</u> support Option 1. The unnessecary contamination of the environment should be avoided by introducing appropriate policy intervention. Australia must align with world best practice and eliminate PFOS, especially as other environmentally friendly alternatives are now available.</p> <p>‘Option 2: Do not ratify, but implement certification requirements’</p> <p>FPAA Response</p> <p>We <u>do not</u> support Option 2. The unnessecary contamination of the environment and associated impact to the community should be avoided by reducing the risk of accidental releases.</p> <p>‘Option 3: Ratify and register permitted uses’</p> <p>FPA Australia Response</p> <p>We <u>do not</u> support Option 3. The fire industry do not need the continued use of PFOS for firefighting and advocate the unnessecary contamination of the environment should be avoided.</p> <p>‘Option 4: Ratify and phase out all non-essential uses’</p> <p>FPA Australia Response</p> <p>We <u>support</u> Option 4. Although the fire protection industry have moved away from providing firefighting foam concentrate that may break down to or contain PFOS (PFOS foam) we would welcome legislation to prevent the</p>

	<p>use of PFOS foam and enforce its disposal to avoid environmental PFOS contamination from existing stocks on sites.</p> <p>Where companies have replaced PFOS foam with an appropriate decontamination process it is possible that a low level of contamination of the replacement foam will occur. FPA Australia contends that to address these instances provisions should be implemented to protect such entities from being held accountable for associated PFOS contamination that is minor.</p> <p>FPA Australia recommends an awareness campaign is implemented for industry sectors which may still hold stocks of PFOS foams advising them that they need to be removed from service and destroyed.</p> <p>Option 4 of the RIS, 'Ratify and phase out all non-essential uses' appears to have the least financial impact and the best environmental outcome.</p>
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