FPA Australia submission to the review of the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 and associated legislation
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1.0  About FPA Australia

Fire Protection Association Australia (FPA Australia) is the national peak body for fire safety that provides information, services and education to the fire protection industry and the community.

FPA Australia is represented across Australia by active members employing over 18,000 individuals representing every aspect of the fire protection community – manufacturers and suppliers of fire protection products and services, fire-fighters, building owners, insurers, designers and building surveyors, government and legislators, educators and anyone else working as part of the fire protection community to provide a safer environment for all Australians.

The Association is a not-for-profit organisation employing over 35 employees with its national head office based in Melbourne with other fulltime resources positioned in other states. The Association’s sole focus as a non for profit organisation is to continually develop the industry in all regards of fire protection and reinvest into the industry to achieve improved safety outcomes.

Central to our vision is a focus on advocacy in order to influence change and deliver improved fire safety outcomes for the community with the following strategic goals:

Our Vision

To promote the protection of life, property and the environment from fire and related emergencies.

Our Mission

To work with our members, government, corporate and community organisations for the continuous improvement in legislation, standards, education, awareness, products and services for the protection of life, property and the environment from fire and related emergencies.

Our Values

Integrity: behaving ethically, acting with loyalty, honesty and transparency and being prepared to express our views.

Independence: being prepared to establish relationships, build trust and foster cooperation without showing favour.

Professionalism: being committed to the continuous professional development of our Association and industry.
1.1 FPA Australia members

FPA Australia members are involved throughout all phases of the fire protection industry as illustrated by figure 1 below.

Figure 1 – Phases of the Fire Protection Industry

Some of the fire protection systems and equipment our members cover through these phases include:

- Fire detection and alarm systems
- Portable and mobile equipment
- Fire sprinkler and hydrant systems, tanks and fixed fire pumps
- Special hazard fire protection systems
- Passive fire protection

Many of our members are fire protection companies that operate in the maintenance test and inspect area.

Figure 2 FPA Australia membership
1.2 FPA Australia Technical Committees

FPA Australia contributes—through its Technical Advisory Committees (TACs) and Special Interest Groups (SIGs)—to the technical requirements for fire protection systems and equipment used in Australia. Over 300 industry subject matter experts contribute significantly to the technical committee process to support the work of the Association.

These technical committees are made up of volunteers from the membership with an interest and expertise in particular areas of fire protection and a commitment to advance the industry.

The TACs and SIGs are managed and coordinated by the FPA Australia Technical Department and the National Technical Advisory Committee (NTAC) under the authority of the FPA Australia Board, see figure 3.
FPA Australia’s TACs and SIGs contribute to a wide variety of organisations and documents including legislation (State, Territory and Commonwealth), Building and Plumbing Codes, Australian Standards, fire brigade documentation, industry guidelines and FPA Australia’s own technical documents, see figure 4.

**Figure 4 FPA Australia Technical Committee input to technical requirements for fire protection systems and equipment**

FPA Australia Technical Committees

- Technical Advisory Committees (TACs)
- Special Interest Groups (SIGs)

Technical requirements for fire protection systems and equipment

- Legislation (Acts, Regulation, Regulatory documents)
- BCA / NCC
- Australian Standards
- Fire brigade documentation
- Industry guidelines
- FPA Australia technical documents
2.0 Introduction

FPA Australia believes the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (the Act) and its associated legislation has been effective in ensuring Australia meets its legal obligations under the Montreal Protocol on Substances that Deplete the Ozone Layer and the Kyoto Protocol, created under the UN Framework Convention on Climate Change, to reduce greenhouse gas emissions.

Australia continues to be a world leader in the phase out of ozone depleting substances and has made significant advances in the responsible management of halon.

We also commend the Australian Government’s recent actions to undertake a comprehensive review of the Act and its associated legislation to ensure a continued protection of the environment, while reducing regulatory burden on businesses and individuals operating under the legislation.

Initially when implementing the provisions of the legislation, the Australian Government recognised that it needed to work in partnership with the fire protection industry. It therefore allowed for the establishment of the Fire Protection Industry (ODS & SGG) Board (the Board) to administer the Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 (Cth) (the Regulations).

As the fire protection industry permit scheme administered by the Board is now well established, FPA Australia believes more stringent adherence to the Regulations by the fire protection industry is expected. In this regard FPA Australia notes the requirement to use only licensed technicians when handling Ozone Depleting Substances (ODS) and Synthetic Greenhouse Gas (SGG) extinguishing agents provides a very important step within the fire protection industry to train and develop a competent workforce.

FPA Australia strongly advocates the importance of ensuring technicians are appropriately trained and assessed to handle ODS and SGG extinguishing agents used in the fire protection industry.

The Association is committed to continuing to work with the Australian Government to deliver a balanced regulatory environment that protects workers, the community and the environment while delivering a business environment that stimulates growth and innovation.
3.0 Ozone Depleting Substances (ODS) and Synthetic Greenhouse Gas (SGG) extinguishing agents in the fire protection industry

FPA Australia commends the Australian Government for taking an outstanding international position in ensuring Australia meets its legal obligations under the Montreal Protocol on Substances that Deplete the Ozone Layer and the Kyoto Protocol, created under the UN Framework Convention on Climate Change, to reduce greenhouse gas emissions. The production of CFCs, carbon tetrachloride and halon has now stopped in Australia. The import of HCFCs is subject to a reducing quota. There are however, no restrictions on the import of HFCs and perfluorocarbons which were introduced principally as replacements for ozone depleting gases.

Halons, which contain bromine, were significant firefighting chemicals and were targeted very early in the piece as substances containing bromine are estimated to be responsible for 25 per cent of the chemical destruction of ozone over Antarctica and 50 per cent over the Arctic. Halon is therefore now banned in Australia and many other countries except in certain approved areas. One approved area is aviation where the relatively low weight, low freezing point and other factors make it the most suitable extinguishing agent at high altitude. However, efforts worldwide are being made to develop replacements for halon. For example halon is also currently permitted in some military vehicles, but FPA Australia notes alternatives such as HFC227ea are now being used in vehicles such as the Australian designed Bushmaster armoured personnel carrier. Though HFC227ea has a zero ozone depleting potential it is 2900 times more greenhouse intensive than CO₂.

Other applications were ODS & SGG extinguishing agents may be found include:

- Computer rooms
- Telecommunication switch stations and facilities
- Manufacturing facilities
- Data processing centres
- Industrial process control rooms
- Engine compartments
- Petro chemical facilities
- Chemical storage rooms
- Museums
- Libraries
Figure 5 shows why halon has been banned in Australia and many other countries. However, it also shows that replacements such as HFC227ea (GWP 2900) still have a significant impact on the environment and the importance of domestic end use arrangements such as the current fire protection permit scheme.

4.0 Domestic end use arrangements

FPA Australia supports a national licensing system enabling businesses and technicians throughout Australia using a single permit with one set of consistent standards when handling ODS and SGG extinguishing agents.

FPA Australia notes the emphasis of undertaking maintenance in relation to fire protection systems and equipment is to ensure operational reliability and avoid or prevent system or equipment failure.

Essentially maintenance of fire protection systems and equipment is about ensuring that the required, approved or established performance level of individual or integrated systems and equipment is continually achieved in order to demonstrate that systems and equipment are fit for purpose. It is therefore imperative to continue to have a competency-based licensing system ensuring technicians in the industry have the appropriate skills to undertake the installation, testing, maintenance, decommissioning, storage and disposal tasks safely with minimal impact on the environment.

Working with ODS and SGG extinguishing agents in any activity where a discharge of the agent is possible as a consequence of the work being performed should continue to require the appropriate licence.
We strongly believe the Board should also continue to provide information to the fire protection industry and the general public on its activities and purpose, thereby improving awareness and understanding of ODS and SGG legislative requirements and the need to reduce the use of controlled substances and the potential risk for accidental emissions of these controlled substances.

Though we are of the view the end use controls have worked well and have been a success, they have not been reviewed for some time and so it is timely to assess and identify any opportunities for improvement.

It is with this view that FPA Australia recommends the following areas for consideration:

- Increasing compliance and enforcement activities
- Issuing infringement notices for breaching licence conditions
- Reviewing all definitions and adding definitions such as reclaim, recover, recycle and accidental discharge (within definition of lawful discharge)
- Updating information on licence entitlements and units of competency within Table 322 of the Regulation
- Review currency of all standards specified in Table 326 of the Regulation
- Review timeframes for requirement to report quarterly usage by Halon Special Permit and Extinguishing Agent Trading Authorisation holders
- Requirement for re-used ODS and SGG extinguishing agents to be cleaned and restored back to manufacturers specification (consideration of recovery, recycling and reuse processes)
- Requirement to ensure all ODS and SGG extinguishing agents sold in the Australian market meet the required specification
- Requirement for system owners to undertake routine maintenance via the use of a licensed technician and the use of a log book
- Requirement for extinguishing agent discharges to be reported to the Board
- Requirement for end of life – product stewardship for ODS and SGG extinguishing agents
5.0 Compliance and Enforcement

‘Compliance’ means following the law and FPA Australia firmly believes compliance is the responsibility of all businesses, organisations, governments and individuals.

We commend the Fire Protection Industry (ODS & SGG) Board’s work to provide ongoing information to the fire protection industry and the general public on its activities and purpose, thereby improving awareness and understanding of ODS and SGG legislative requirements and the need to reduce the use of controlled substances and the potential risk for accidental emissions of these controlled substances.

FPA Australia emphasises education, raising awareness of impacts, obligations and duty of care has been effective in encouraging industry to comply. However, the Association believes there are some aspects which could be strengthened leading to higher levels of compliance in the fire protection or related industries. Such aspects include allowing for the publication of details of cancelled or suspended permits, greater enforcement activities, fines and expanding the scope of infringement notices.
6.0 Why is maintenance of fire protection systems and equipment important?

FPA Australia believes that if maintenance is not undertaken by a licensed technician, the risk of system or equipment failure increases over time. Figure 6 below simply illustrates this relationship between performance level, maintenance and increased risk exposure. Minimising this risk is the objective and importance of maintenance and key objectives which form part of the fire protection industry permit scheme.

**Figure 6 – Performance level, maintenance and risk exposure**

It is true that in some instances regardless of whether maintenance has been undertaken by a licensed technician, systems and equipment will reach the end of their design lifetime and will require replacement. However, routine inspection, testing and preventative maintenance activities would be expected to identify this and ensure the need for replacement is identified and acted upon.
Figure 7 below illustrates that in order to capitalise on the investment made to incorporate fire protection systems and equipment via the design and installation phases, it is important for a licensed technician to undertake routine maintenance to ensure these systems and equipment remain ‘fit for purpose’ or ‘in-use’ phase.

Figure 7 – Achieving fire safety objectives

The domestic end use arrangements prescribe the requirement for a licenced technician to undertake the installation, testing, maintenance and decommissioning of a gaseous fire extinguishing system. However, amendments to the legislation are required for requirements for system owners to undertake routine maintenance, repair, rectification or resolution via the use of a licensed technician.
7.0 Halon and the role of the National Halon Bank

Originally introduced as a fire fighting agent in Australia in the early 1970s, halons quickly replaced many previously accepted firefighting products because of their superior firefighting characteristics and ease of use.

Because of the very aggressive way halons deplete ozone, they were banned from sale in developed countries from January 1, 1994 (except for a very restricted number of essential uses). This ban is an important policy element of the international treaty which enforces the ban – the Montreal Protocol on Substances that Deplete the Ozone Layer.

Today halon is only used in very limited quantities domestically. Currently, halon is only allowed to be used for commercial and private aviation, maritime (including foreign flag vessels operating in or through Australian waters) and certain defence applications.

In 1993, the Australian Government established the National Halon Bank (NHB) to store decommissioned halon for destruction or reclamation to meet essential uses until an alternative was found for all current uses.

The NHB was the first facility in the world solely dedicated to the storage, decanting, recycling and destruction of ozone depleting substances.

FPA Australia notes the vital component the NHB continues plays in Australia’s Halon Management Strategy which in turn helps Australia meet our obligations under the Montreal Protocol. The continuing ongoing support of the fire protection industry around Australia by accepting halon to transfer for disposal is equally important in achieving the goals of the Halon Management Strategy.

Significantly the Board continues to promote awareness of the environmental dangers posed by discharges of halon and other ODS and SGG extinguishing agents through the domestic end use arrangements.
8.0 Working with the Australian Government

FPA Australia was first appointed to provide the services of the Fire Protection Industry (ODS & SGG) Board (the Board) in accordance with regulation 311(1) of the Regulations on 6 June 2005. The Association will continue to take a leadership position in achieving substantial reductions in the emissions of ozone depleting and synthetic greenhouse gases while actively promoting compliance with all provisions of the legislation.

We look forward to continuing our successful partnership with the Australian Government while actively promoting industry's products, services and knowledge.

The cooperation between FPA Australia and the Australian Government serves as a valuable model for cooperative partnerships between the fire protection industry and government. This partnership serves to highlight the achievements that are possible by adopting and industry collaborative approach.

We strongly advocate the overriding objective to identify options to prevent the unnecessary discharge of any scheduled ODS and SGG extinguishing agents and improve awareness of the safety risks.

In addition to the comments provided above, the Association is committed to working collaboratively with the Australian Government through representation on the technical working group and provide any support to the review of the Act and its associated legislation.

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