Fact Sheet

Fire Protection Industry (ODS & SGG) Board

Scheduled Extinguishing Agents in the Marine Industry

The fire industry's primary concern is to safeguard life, assets, and the environment. The importance of safety at sea relies heavily on correct fire protection procedures which is key to shipboard safety. This applies to cruise ships, merchant ships, and naval vessels and is vitally important for the fishing and pleasure craft fleet.

Ozone depleting substances (ODS) and synthetic greenhouse gases (SGG) (scheduled extinguishing agents) used in vessels are regulated under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (the Act) and the *Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995* (Regulations).

Fire protection is an essential component of marine safety equipment. Depending on the vessel size, gaseous fire suppression systems can protect:

- Internal combustion
- Gas turbines
- Main or auxiliary propulsion
- Machinery spaces
- Paint and oil lockers
- Pump rooms
- Control rooms

Gaseous fire suppression systems will be found in most vessels including:

- Passenger ferries
- Police vessels
- Barges
- Car ferries
- Tugs
- Major shipping generally

Gaseous fire suppression systems protecting machinery spaces, particularly in the case of smaller craft, may well incorporate scheduled extinguishing agents.

Australian Maritime Safety Authority (AMSA)

AMSA is Australia's national agency responsible for maritime safety, protection of the marine environment, and maritime aviation search and rescue.

AMSA is a statutory authority established under the *Australian Maritime Safety Authority Act 1990* (the AMSA Act) and is in control of the safety of domestic commercial vessels and the seafarers who are operating in the domestic commercial industry.

AMSA regulates light commercial vessel safety around Australia, while State and Territory agencies administer safety requirements for private vessels. While AMSA is the single national regulator for commercial vessel safety, the Department of the Environment and Energy regulates the use of scheduled extinguishing agents on these vessels. For further information on AMSA and their National Standards for Commercial Vessels please go to ***www.amsa.gov.au***.

Foreign flagged vessels

- Must have fire systems in accordance with International Maritime Organisation (IMO) requirements.
- Halon systems are still permitted, and halon can be purchased from the National Halon Bank or companies which hold a Halon Special Permit (HSP) and an Extinguishing Agent Trading Authorisation (EATA).
- Access to supplies of halon is limited and minimum quantities will only be provided for recharging gaseous fire suppression systems to ensure safe operation.
- Halon will not be supplied to vessels registered in non-Montreal Protocol signatory countries. A register can be viewed at ***www.dcceew.gov.au*** by searching for *register of Montreal Protocol countries*.

Local commercial vessels

- The most commonly used scheduled extinguishing agents used are FM-200®, FE-227™ and NAF-SIII because of their ability to act as leading alternatives to halon.
- FM-200® can protect from most of the hazards that halon does but is less toxic.
- Halon systems are not permitted.
- Scheduled extinguishing agents, FM-200®, FE-227™ and NAF-SIII, must be obtained from companies holding an EATA.

Recommendations of the Board

The Board recommends the following actions to ensure that technicians working in the marine industry are compliant with the Act and Regulations while contributing to Australia's effort in reducing emissions of scheduled extinguishing agents into the atmosphere:

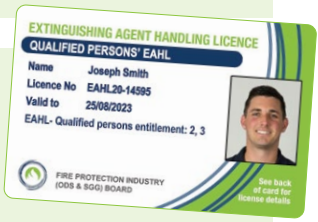
- Builders/owners/operators of vessels with gaseous fire suppression systems containing scheduled extinguishing agents must ensure that the installation and maintenance of these systems is done by licensed technicians.
- All technicians working with scheduled extinguishing agents must hold the appropriate licence, authorisation, or permit.
- Regular service and maintenance of gaseous fire suppression systems to ensure full functionality in the event of a fire.

While there is no requirement to replace systems, owners should consider changing systems to environmentally friendly alternatives. There are several extinguishing agents that are not regulated under the Act and Regulations.

For example, owners may wish to consider systems which use Novec™ 1230, inert gas or condensed aerosols. The system replacement could be timed with a major service of the system – at the appropriate period for a hydrostatic test for example.

Did you know...

- Halon 1211 and halon 1301 was primarily used in the marine industry, however, in 1993 it was banned from being imported into Australia.
- Halon 1211 and halon 1301 are scheduled extinguishing agents controlled under the Montreal Protocol.
- The ozone depleting potential (ODP) and global warming potential (GWP) of halon is higher than CO_2. Halon has an ODP of 10 (meaning that it is 10 times more potent in destroying the atmosphere) and a GWP of 6200 (meaning that it is 6200 times as potent as CO_2 in warming the atmosphere).



Do you require a licence?

Licences, authorisations, and permits are issued by the Fire Protection Industry (ODS & SGG) Board and are required when handling scheduled extinguishing agents in the marine industry. These are issued by the FPIB.

- Vessel owners and operators do not need to be licensed but have obligations to prevent emissions of scheduled extinguishing agents.
- Technicians installing, servicing, maintaining or decommissioning systems containing scheduled extinguishing agents must hold an ***Extinguishing Agent Handling Licence (EAHL)***.
- Technicians or companies who buy, store and/or sell scheduled extinguishing agents must hold an ***Extinguishing Agent Trading Authorisation (EATA)***.
- Foreign flagged vessels can acquire halon when they are in Australian waters and technicians servicing systems on foreign flagged vessels must hold an ***EAHL***.

The FPIB has produced a Good Practice Guide and a range of factsheets aimed at educating field practitioners in appropriate work practices to avoid unnecessary emissions of scheduled extinguishing substances. These can be found at ***www.fpib.com.au***. All technicians should be familiar with this guide and perform work according to the relevant Australian standards.

For more information or to obtain a licence: 03 8892 3131 | ozone@fpib.com.au **fpib.com.au**