Fact Sheet

Fire Protection Industry (ODS & SGG) Board

Scheduled Extinguishing Agents in Building and Facility Management

Ozone depleting substances (ODS) and synthetic greenhouse gases (SGG) used in the Australian fire protection industry 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* (the Regulations).

The Ozone legislation is in place to:

- Promote the responsible management of scheduled substances to minimise their impact on the atmosphere;
- Provide controls on the manufacture, import, export, and use of SGGs under the Framework Convention on Climate Change and the Kyoto Protocol;
- Provide controls on the handling, use, acquisition, storage, and disposal of scheduled substances;
- Encourage industry to replace ozone depleting substances; and
- Ensure Australia meets its international obligations under the Montreal Protocol on Substances that Deplete the Ozone Layer and the United Nations Framework Convention on Climate Change.

Gaseous Fire Suppression Systems

Gaseous fire suppression systems using scheduled extinguishing agents are widely distributed in commercial and industrial buildings across Australia. These systems can be used to protect facilities such as:

- Data centres in online businesses and elsewhere electrical switch and battery rooms;
- Telecommunications facilities;
- Medical apparatus rooms in hospitals;
- Chemical and physics laboratories;
- Libraries and archives;
- An extensive range of manufacturing processes and control centres; and
- Clean rooms and so on and will ensure the safety of those working in the area.

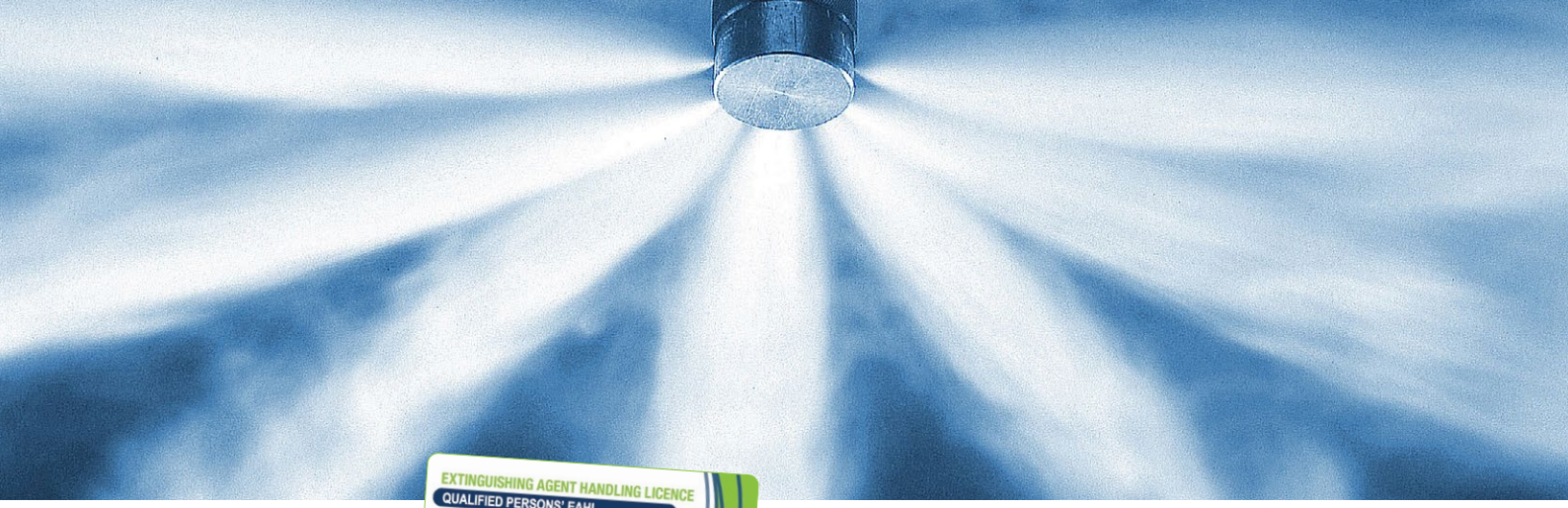
Types of gaseous extinguishing agents:

- Halocarbons (e.g. FM-200®; HFC227ea);
- Inert gases (e.g. nitrogen, argon and nitrogen mixtures, argon, nitrogen, and carbon dioxide mixtures); and
- Perfluoro ketones (e.g. Novec 1230™; FK 5-1-12).

Why are they referred to as clean agents?

- Extinguish fires without collateral damage (no residues; no clean-up required);
- Can extinguish shielded, obstructed or three-dimensional fires in complex building geometries; and
- Don't conduct electricity.

Understanding how extinguishing agents in your gaseous fire suppression system are regulated under national law has many benefits including protecting your workers and the environment.



Do you require a licence?

All individuals / companies in the building industry that handle any ozone depleting substances or synthetic greenhouse gases must hold the appropriate licence and/or authorisation. These are issued by the Fire Protection Industry (ODS & SGG) Board. These are issued by the FPIB.

- Any person in the building industry who handles ozone depleting or synthetic greenhouse gas, listed in the Act, where there is a risk of emission requires the appropriate ***Extinguishing Agent Handling Licence(s) (EAHL)***.
- Any person or company who buys, stores and/or sells extinguishing agents must hold an ***Extinguishing Agent Trading Authorisation (EATA)***.

Recommendations of the Board

The Fire Protection Industry (ODS & SGG) Board recommends the following to the building industry to increase awareness and understanding of ozone depleting substance and synthetic greenhouse gas legislative requirements. This includes the need to reduce the use of scheduled extinguishing agents and to minimise the potential risk of accidental emissions.

Recommendations include:

- Technicians installing, servicing, maintaining or decommissioning systems containing scheduled extinguishing agents must hold an Extinguishing Agent Handling Licence (EAHL);
- Technicians should also keep up to date on new technologies for dealing with gaseous fire suppression systems;
- The use of logbooks to record all maintenance activity. Proper documentation will provide a full life-cycle history for a particular gaseous fire suppression system. Not only will all maintenance activity be recorded but the logbooks will also provide a historical record of the licence number of the technicians servicing the system; and
- Regular service and maintenance of gaseous fire suppression systems. This will ensure that the systems are fully functional in the event of a fire.

Discharges can occur due to...

- Human error / system not isolated;
- Equipment malfunction; and
- A lack of understanding about the sensitivity of gaseous fire suppression systems or the lack of adequate maintenance;

Did you know...

- The most used scheduled extinguishing agents are FM-200®, NAF-SIII and very minimal NAF-PIII.
- FM-200® acts as a leading alternative to halon.
- FM-200® leaves no significant post discharge clean up, obscuration on discharge or damage to sensitive equipment.
- Most SGGs have very high global warming potentials (GWPs). The most common SGG used in buildings is FM200®, which has a GWP of 3,350 (meaning that it is 3,350 times as potent in the atmosphere as carbon dioxide).

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**