



Dangerous Goods Safety Bulletin No. 0317

Access to fire extinguishers on petrol station forecourts

Background

Petrol stations contain large quantities of flammable dangerous goods so the consequences of a fire can be catastrophic. Under the Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 and relevant Australian Standards (i.e. AS 1940, AS 2444), there are requirements for petrol station operators to:

- ensure that fire extinguishers are
 - always available for immediate use to extinguish a fire
 - not obstructed or positioned such that their operation or access to them is hindered
- provide induction, information and training on fire equipment kept at the site.

Concerns have been raised with the Department regarding the inaccessibility of fire extinguishers on petrol stations forecourts. In some instances due to theft, petrol station operators have been keeping fire extinguishers inside the store or removing the key from the break-glass screen of the fire extinguisher.

Note: An example of what can happen when a fire extinguisher is not used during the early stages of a fire is illustrated by the Maddington fuel tanker fire. “On Friday 15 May 2009, a fuel tanker was unloading petrol into underground tanks at a suburban service station when a fire started at the fill point. During the early stages of the fire, the tanker driver did not use the fire extinguishers installed on the tanker nor those available at the petrol station. The fire spread from the fill point to the tanker. Use of the available fire extinguishers may have prevented the tanker from catching fire.”



Maddington fuel tanker fire in 2009

Summary of hazard

The delay in retrieving a fire extinguisher that is not readily or safely available may result in the escalation of a fire so it ‘takes hold’, causing a significant amount of damage and potential injury to those in the vicinity.

Contributory factors

- Petrol station operators are placing fire extinguishers in less accessible locations.
- The risks associated with relocating or restricting access to fire extinguishers have not been effectively identified, evaluated or addressed in the context of the overall operation of the site.

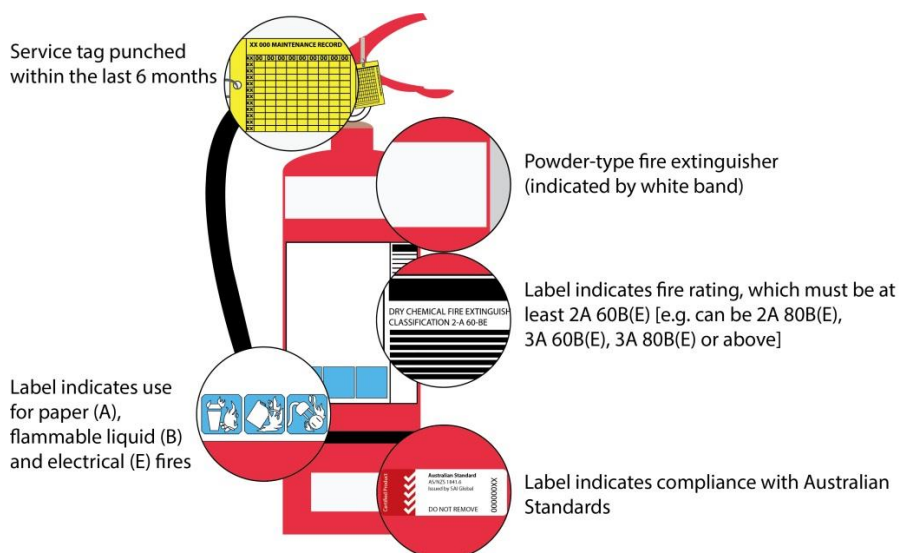
Actions required

Safe systems of work

- Review risk assessments before moving the location of safety equipment.
- Confirm that fire extinguisher locations and access meet the requirements of the relevant legislation and Australian Standards.

Fire extinguisher requirements

- Provide a minimum of two powder-type fire extinguishers at each service station.
- Confirm each extinguisher has a minimum rating of 2A 60B(E).
- Locate extinguishers near dispensers or other items being protected.
- Confirm extinguishers are accessible without undue danger in an emergency.
- Mark each extinguisher location with a 'FIRE EXTINGUISHER' sign mounted at least 2 m above ground.
- Routinely service fire extinguishers at least every 6 months.



Fire extinguisher requirements for petrol stations

Further information

- Standards Australia, www.standards.org.au
AS 1851 *Routine service of fire protection systems and equipment*

AS 1940 *The storage and handling of flammable and combustible liquids*

AS 2444 *Portable fire extinguishers and fire blankets – selection and location*

- Department of Mines, Industry Regulation and Safety

Dangerous goods safety matters – Self-check guide for petrol stations

www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS_G_SelfCheckGuideForPetrolStations.pdf

Incident investigation report – Fuel tanker fire at Maddington

www.dmp.wa.gov.au/Documents/Dangerous-Goods/DGS_SafetyStats_AR_FuelTankerFireAtMaddington2009.pdf

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