

Workplace Health and Safety Queensland

SAFETY ALERT**Fire hazard of static electricity when handling flammable liquids**

The purpose of this safety alert is to:

- Inform people about the danger of igniting flammable liquids by static electricity.
- Provide guidance on how to control static electricity when filling containers with flammable liquid at service stations.

Background

At a service station in Sydney recently, a car and bowser caught fire when the car owner was holding a can while filling it with petrol. The person was not injured, but the car and bowser were destroyed.

The fire was caused by the discharge of static electricity that ignited the vapours from the petrol because the can was not earthed. Similar incidents are reported frequently from Australia and overseas.

Hazards and risks

- Dispensing petrol creates a hazardous atmosphere around the dispenser by releasing flammable vapours.
- Flowing flammable liquids can generate a static electricity discharge and sparks, resulting from the discharge, can ignite the vapours from the flammable liquids.
- There can be other sources of ignition in a workplace, but static electricity is particularly risky because it is often not 'visible' or well understood by people.

Recommended control measures

- Use proper earthing and bonding to control static electricity.

- Always place the fuel container on the ground before filling with flammable liquid.
- Never fill a container in the boot of a car, in the tray, or on the tailgate of a utility truck.
- Never use unapproved containers to store fuel.
- Always use a plastic fuel container that complies with AS2906 **or** a metal container with a close-fitting lid.
- Do not fill containers with a capacity greater than 25 litres.
- Reduce splash filling as much as possible.
- Always read and observe the signs at service stations that state the need to place a fuel container on the ground when filling it.

Further information

More information about obligations relating to this issue can be found in:

- Dangerous Goods Safety Management Act 2001:
 - s.24 Obligation of employees and other persons
- Dangerous Goods Safety Management Regulation 2001:
 - s.38 Transfer of stated dangerous goods or combustible liquids
 - s.36 Elimination of ignition sources in hazardous areas.

For more workplace health and safety information, visit

www.worksafe.qld.gov.au or call the Workplace Health and Safety Infoline on 1300 369 915.

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