Safe storage and handling of lawn mower fuel

Engine fuel is highly flammable and can be dangerous for the users of machinery. The associated risks can be reduced through the safe storage and handling of fuels e.g. lawn mower fuels and containers. The following precautions should be followed to minimise the chance of fuel fires and operator injuries.

Storage of lawn mower fuel

- Flammable liquids must be stored in suitable containers.
  - Metal containers are suitable if they are of good quality, well sealed and suitably labelled.
  - The only suitable plastic containers are those specifically marketed for the purpose of fuel storage. These will be embossed with a marking indicating that they comply with the requirements of *AS/NSZ 2906:2001 – Fuel containers, portable, plastic and metal*. Fully compliant containers can be purchased from hardware stores, autoparts and accessory retailers.
- All containers must be clearly labelled as containing flammable liquids.
- Food and drink containers, or glass containers, must not be used for the storage of fuels.
- Containers should be stored in a well-ventilated place, well clear of electrical equipment and other potential ignition sources.
- Mower fuels are not compatible with almost all other classes of dangerous goods. It is recommended that fuel is stored at least five metres from all other dangerous goods stored at the site.
- The volume of flammable liquids stored on site should not exceed 250 litres. Stored quantities in excess of this amount require placarding under the Work Health and Safety Regulation 2011 (Qld) (Schedule 11). All fuels must be stored in accordance with the requirements of *AS/NZ1940:2004 – The Storage and Handling of Flammable and Combustible Liquids*. Quantities in excess of 2500 litres require notification be made to the regulator.
- The volume of individual containers storing fuel should not exceed 30 litres. (Controlled volumes reduce the risk of manual handling injuries that may result from lifting and moving heavy objects).
- Fuel storage containers should be contained within a storage area or room with bunding* and should not be stored with incompatible substances (e.g. fertilisers and combustible materials).
- The fuel should be stored away from ignition sources (naked flames, grinder sparks, welding areas, work areas where electrical or mechanical equipment is used).
* bunding can be a tray or barrier designed to contain liquid spills e.g. leaking fuel/chemical containers.

When handling fuel to fill a mower

- Always refuel outdoors where it is well ventilated.
- Use a funnel when refuelling to minimise spillage.
- Do not smoke while refuelling or whenever handling the fuel.
- Add fuel before starting the engine. Never remove the cap of the fuel tank or add fuel while the engine is running or when the engine is hot.
- If fuel is spilled, do not attempt to start the engine. Be sure to move the machine away from the area of spillage and avoid creating any source of ignition until the fuel is evaporated and the vapour dispersed.
- Replace all fuel tank and fuel container caps securely.
- Consider obtaining a spill kit suitable for fuel spills.

Transport of fuel

It is important that all risks associated with transporting dangerous goods are managed to minimise the potential for injuries or illnesses, including manual handling. Refer to the Chapter 4, in the *Guideline for Managing Risk with Chemicals in DoE Workplaces* for more specific information.