

Workplace Health and Safety Queensland

Information guide – Rural industry

16. Dangerous goods and combustible liquids

The *Dangerous Goods Safety Management Act 2001* and the *Dangerous Goods Safety Management Regulation 2001* prescribe safety obligations and ways to handle and safely store stated dangerous goods and combustible liquids.

The occupier of a rural place has a general obligation to comply with the Act and take all reasonable precautions and care to achieve an acceptable level of risk. An acceptable level of risk is achieved when risk is minimised to be as low as possible.

Dangerous goods and combustible liquids

Dangerous goods are hazardous substances that have the potential to present an immediate threat to people, property or the environment if not properly controlled. They are divided into nine classes by the Australian Dangerous Goods Code (ADG Code), according to the nature of the hazard. These are described in the table below.

Class	Nature of hazard
1	Explosives
2	Gases
3	Flammable liquids
4	Flammable solids
5	Oxidizing agents
6.1	Toxic substances
6.2	Infectious substances
7	Radioactive substances
8	Corrosive substances
9	Miscellaneous

Each class of dangerous goods is represented by an easily identifiable symbol, which can be found in the fact sheet 'Chemicals – storage and disposal'.

Some examples of dangerous goods found on farms are: acetylene gas and LPG (Class 2), unleaded petrol (Class 3), pesticides (Class 6.1), hypochlorite solution (bleach-Class 8).

Whereas flammable liquids are dangerous goods Class 3, combustible liquids have higher flashpoints and are more difficult to ignite than flammable liquids. They are not classified as dangerous goods by the ADG Code, but are categorised either C1 or C2, according to their flashpoint. An example of a combustible liquid used on farms is diesel.

What is a rural place and what are the requirements?

The regulation defines a rural place to be:

- an area of five hectares or more and used by its occupier for agricultural, horticultural, floricultural, aquacultural or pastoral purposes; and
- at which there are no stated dangerous goods or combustible liquids being stored for resale.

Although a rural place is not classified as a dangerous goods location, an occupier must still reduce risk associated with dangerous goods and combustible liquids. To meet this obligation, the following requirements must be met:

- **Risk assessments** help identify the hazards and minimise injury risk by implementing appropriate control measures. A current Material Safety Data Sheet (MSDS) is to be on hand for each stated dangerous good. MSDSs are to be accessible to people who may be exposed, including emergency personnel. A register of all stated dangerous goods is to be kept.
- **Decommissioned storage** or handling systems are to be thoroughly cleaned and made safe.
- **Worker knowledge** about safe storage and handling to be improved through induction, information, education, training and supervision.
- **Personal Protective Equipment (PPE)** is to be provided to exposed workers (e.g. respirators, gloves, chemical resistant boots, eye wash etc).
- **Access by unauthorised people** is to be prevented.
- **Contamination** and interaction of incompatible goods must be prevented (e.g. with food or personal products).
- **Spills** to be immediately contained and removed requiring equipment and procedures to be on hand.
- **Ignition** sources, such as naked lights, sparks or mobile phones are to be eliminated.

- **Packages** or containers of stated dangerous goods are to be marked in accordance with the ADG Code. The code requires the manufacturer or importer to provide a label on the package that contains information on the UN number (a unique substance identifier), Class, subsidiary risk and packing group to which the goods belong. An example of a subsidiary risk is a pesticide which belongs to Class 6.1 (toxic substances) that contains a flammable solvent (Class 3) base. The packing group refers to a measure of danger posed by the substance. The packing group is divided into three categories to indicate (i) high risk, (ii) medium risk and (iii) low risk.
- **Placarding** with information of stated dangerous goods and combustible liquids are to be displayed on tanks. Placards are required on tanks of more than 500 L of LPG or more than 450 L of other classes of dangerous goods or combustible liquids (e.g. diesel). An information placard displayed for a tank is to be clearly visible from normal approaches to the tank. The placard for combustible liquids in tanks is rectangular with the words 'combustible liquid' in letters 100 mm high.

More information

Further information is available from www.worksafe.qld.gov.au or by calling the WHS Infoline on 1300 369 915.

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