



## DANGEROUS GOODS LICENSING GUIDELINES

### Table of Contents

1. INTRODUCTION	1
2. DANGEROUS GOODS CLASSES	1
3. LICENSING QUANTITIES	1

### 1. INTRODUCTION

Dangerous Goods are those substances which are classified under 9 classes according to the NSW Dangerous Goods Act (1975). Substances which come under some of these classes must be licensed.

Some common dangerous goods are petrol, LP gas, oxygen and acetylene cylinders, pool chlorine, some pesticides and weedicides., flammable solvents (ie methylated spirits, acetone and turps), kerosene, some paints and glues, combustible liquids, (ie diesel) acids and caustic soda, explosives, including fireworks are also dangerous goods.

The purpose of licensing stored dangerous goods is to provide greater protection for people who handle dangerous goods and the public. If the quantities of dangerous goods are large enough the University must ensure that this is included in the University's dangerous goods licence.

For information regarding the University's dangerous goods licence, contact the OHS Unit (ext 4365).

### 2. DANGEROUS GOODS CLASSES

Dangerous goods are divided into nine classes according to their dangerous properties. Classes 1, 2, 4, 5 and 6 are further subdivided into sub-classes (eg 5.1, 5.2). In addition, goods in Classes 3, 4, 5, 6 and 8 are also organised into Packing Groups (PG) which indicate the degree of danger (PG I - great danger, PG II - medium danger, PG III - minor danger).

Dangerous goods in any quantity must be stored safely and in compliance with the requirements of the Dangerous Goods Act, 1975 and its Regulations. Dangerous goods above certain quantities must be licensed.

### 3. LICENSING QUANTITIES

If any of the quantities listed below is exceeded at the site, then a licence is required and contact must be made with the OH&S Unit at the University immediately.

#### **Class 1 Explosives**

- 2.5 kg of blasting explosives, 110 detonators, 250 m detonating fuse if received under the authority of a Permit to Receive Explosives, or a shotfirer's Permit
- 10 kg of propellant powder if received under the authority of a Pistol Licence or Shooter's Licence
- 2.5 kg of propellant powder if received under the authority of a Shotfirers' Permit or Permit to Receive Explosives
- 10 kg of marine distress signals

- 1000 kg of toy fireworks
- a licence is not required for any quantity of display fireworks if received under the authority of a Display fireworks Permit
- 2000 rounds of safety cartridges kept for sale
- a licence is not required for any quantity of safety cartridges if they are not kept for sale
- a licence is not required for any quantity of explosives, which includes safety cartridges, if received under the authority of a collector's Permit
- a licence is not required for any quantity of 1.4S explosives except where specific quantities are mentioned above

**Class 2  
Gases**

**Note:** A licence is required for any site where LP Gas is decanted for sale

- 300 kg of liquefied flammable gas such as LP Gas when connected for use (eg to a stove, heater)
- 150 kg of liquefied flammable gas not connected for use and not for sale (eg reserve cylinders for later use or cylinders for filling forklift cylinders)
- 25 kg of liquefied flammable gas kept for sale in containers each not exceeding 6 kg of gas
- 60 cubic metres of compressed flammable gas (eg acetylene, hydrogen) ie up to 8 'G' size cylinders of 7 cubic metres each
- 2,500 kg of liquefied flammable gas if it is kept outside a city or town and at least 30 m from any public place or protected work, and it is kept for use on the premises (ie it is not kept for sale). (See page 10 for an explanation of the term *protected work*.)
- a licence is not required for aerosols when classified as Class 2.1, or 2.2, or for any quantity of liquefied flammable gas kept in disposable containers (ie containers not exceeding 1 litre and not refillable).

**Class 2.2 - Non-flammable, Non-toxic Gases**

- 300 cubic metres of cryogenic liquid (eg liquid oxygen, liquid nitrogen, usually in tanks)
- a licence is not required for any quantity of non-cryogenic Class 2.2 gases (eg compressed oxygen, compressed nitrogen, refrigerant gases, compressed air, usually in cylinders).

**Class 2.3 - Poisonous Gases**

**Note:** A site which is open to the public (eg a municipal swimming pool) must have a licence to keep any amount of liquefied poisonous gas e.g. chlorine gas.

- 50 kg of liquefied poisonous gas provided that it is kept in or on premises or a place not open to the public (Examples of poisonous gas include chlorine, anhydrous ammonia, sulphur dioxide)
- 20 cubic metres of non-liquefied poisonous gases (eg carbon monoxide)
- 2,500 kg of anhydrous ammonia provided that it is kept outside a city or town and at least 30 m from any public place or protected work, and it is kept for use on the premises (ie it is not kept for sale). (See page 10 for an explanation of the term *protected work*.)

**Class 3**

**Flammable Liquids**

**Note:** All underground tanks containing flammable liquids of Packing Group I, II or III must be licensed, except where a rural industry is carried out on premises of more than 2 ha.

- 100 litres of Packing Group I or II if kept above ground (eg petrol, methylated spirits, acetone)
- 1000 litres of Packing Group III if kept above ground (eg kerosene)
- 5000 litres of Packing Group I, II or III when kept on premises of at least 2 hectares in area, on which a rural industry is carried out (see page 10 for the definition of rural industry)
- a licence is not required for any quantity of manufactured product provided that it is kept in containers no larger than 5 litres each for Packing Group II, or 25 litres each for Packing Group III. However, the containers must be approved packages.

**Note:** Manufactured product means a mixture of dangerous goods of Class 3 with at least 10% of solid material. Examples include some paints, lacquers, adhesives and varnishes. Check with your supplier.

**Combustible Liquids (C1 or C2)**

- a licence is not required for any quantity of Combustible Liquids C1 (eg diesel or heating oil) unless it is stored in a tank which can hold more than 50,000 litres.
- A licence is not required for any quantity of Combustible Liquids C2 (eg engine oil, olive oil).

**Note:** Please mark the location of any Combustible Liquid storage tank on the Site Sketch

**Class 4  
Flammable Solids  
& Reactive  
Substances**

**Class 4.1 - Flammable Solids**

- 25 kg of "wetted" nitrocellulose (UN 2557)
- 50 kg of Packing Group I
- a licence is not required for any quantity of Packing Group II or III (eg sulfur, matches).

**Class 4.2 - Spontaneously Combustible Substances**

- 100 kg of Packing Group I (eg aluminium alkyls, diethyl zinc)
- a licence is not required for any quantity of Packing Group II or III (eg activated carbon)

**Class 4.3 - Dangerous When Wet**

- 100 kg of lithium aluminium hydride, ethereal (UN 1411)
- a licence is not required for any quantity of other Class 4.3 substances (eg calcium carbide)

**Class 5  
Oxidizing Agents  
and Organic  
Peroxides**

**Class 5.1 - Oxidizing Agents**

**Note:** A licence is required for ammonium chlorate, whatever the quantity

- 25 kg of Packing Group I (except ammonium chlorate)
- a licence is not required for any quantity of Packing Group II or III, except for ammonium nitrate or dry pool chlorine, see below:
- Ammonium Nitrate
  - 25,000 kg of high density fertiliser grade ammonium nitrate when kept on a site where a rural industry is carried out and if the depot is at least 50 metres from every other building
  - 500 kg elsewhere
- Dry Pool Chlorine

**Note:** Liquid pool chlorine is Class 8 dangerous goods - see separate Class 8 list

- 50 kg if not being kept for sale (eg for swimming pool water treatment)
- 200 kg kept exposed for sale in packages not exceed 20 kg
- 1000 kg at a pool shop, only if goods are:
  - contained in packages not exceeding 20 kg, and
  - separated by at least 5 metres from:
    - i) combustible or readily oxidizable materials, and
    - ii) dangerous goods of Classes 3, 8 and other class 5, and
    - iii) sulphur; and
    - iv) powdered metal; and
    - v) any material that could oxidise the goods or catalyse their decomposition

**IMPORTANT:** Any site which sells liquid fuel (eg petrol or diesel) must have a licence to keep any amount of dry pool chlorine

**Class 5.2 - Organic Peroxides**

- 25 kg      NOTE: All Class 5.2 Organic Peroxides are Packing Group II.

**Class 6.1  
Toxic (Poisonous)  
Substances**

- Packing Group I: 10 kg or 10 litres (eg sodium cyanide)
- Packing Group II: 100 kg or 100 litres (eg some pesticides)
- Packing Group III: 1000 kg or 1000 litres (eg lead acetate, some pesticides)

**Class 6.2  
Infectious  
Substances**

The storage of Class 6.2 goods is generally controlled by the NSW Department of Health. A dangerous goods licence is not required by WorkCover.

**Class 7  
Radioactive  
Substances**

Controlled by the Environment Protection Authority. A dangerous goods licence is not required by WorkCover.

**Class 8  
Corrosive  
Substances**

- Packing Group I: 50 kg or 50 litres (eg allyl chloroformate, hydrofluoric acid)
- Packing Group II: 500 kg or 500 litres (eg glacial acetic acid, sulphuric acid, hydrochloric acid sodium hypochlorite, liquid pool chlorine)
- Packing Group III: 1000 kg or 1000 litres (eg car batteries).

**Class 9  
Miscellaneous**

A licence is not required for any quantity (eg polystyrene beads, dry ice, lithium batteries)

This guide provides general information only. Further information may be obtained from:

1. The OH&S Unit;
2. The NSW Dangerous Goods Regulation 1978;
3. The Australian Code for the Transport of Dangerous goods by Road and Rail (ADG Code), current edition (Australian Government Publishing Service);
4. Your regional WorkCover safety inspector.