

Self Assessment for the Storage of Dangerous Goods

Preliminary

Under the Dangerous Goods (Storage and Handling) Regulations 2000, an occupier is required to identify any hazards associated with the storage and handling of Dangerous Goods and perform a risk assessment with regards to these hazards. (Regulation 404 and 405)¹.

The regulations are supported by a Code of Practice that provides practical guidance on how to comply with specific duties. The provisions in the code are not mandatory, however compliance with it is one way of ensuring compliance with the requirements of the regulations.

A number of Australian Standards are incorporated in the Code of Practice. Incorporation in the code has the effect of making that standard form part of the code. To the extent that provisions of an incorporated standard are relevant to a duty under the regulations, following those provisions is regarded as compliance with the relevant duty under the regulations.

In order to comply with this requirement a self-assessment of the design against AS1940-2004, "The Storage and Handling of Flammable and Combustible Liquids." has been performed. Compliance of design against this standard is deemed to be an adequate risk assessment for the purposes of these regulations.

There is no requirement to request written advise from the relevant fire authority as the storage of combustible liquid is less than 100,000 litres².

The occupier must ensure that a written plan for dealing with emergencies associated with the storage and handling of the dangerous goods on the premises is developed. (Regulation 437)³
This plan is to be communicated to persons who are engaged by the occupier to work at the premises and who may be exposed to risk as a result of an emergency.

As the quantity of combustible liquid does not exceed 100,000 litres, the Authority does not need to be notified. (Regulation 506)⁴.

Signage as per Appendix 1 (attached) is required. Figure 1 should be installed at the entrance to the property. Figure 2 should be installed on the tank.

Reference 1

Dangerous Goods (Storage and Handling) Regulations 2000

404. Identification of hazards

(1) An occupier of premises where dangerous goods are stored and handled must ensure that any hazard associated with the storage and handling of dangerous goods at the premises is identified, having regard to the state of knowledge of the hazard.

(2) Without affecting the generality of sub-regulation (1), the occupier, when identifying hazards, must have regard to--

(a) any information about the hazardous properties inherent to the dangerous goods, including a MSDS for the dangerous goods available to the occupier; and

(b) the chemical and physical properties of the dangerous goods, including physical state, viscosity, vapour pressure, chemical energy, particle size, solubility, electrical conductivity, reactivity, combustion products and concentration; and

(c) any manufacturing and transport processes at the premises involving the dangerous goods, including the temperatures and pressures to which the goods are subjected, physical processes such as separation, mixing, absorption and changes of state and processes involving chemical reaction; and

(d) the structures, plant (including the characteristics of the materials used in the plant), systems of work and activities that are used in the storage and handling of the dangerous goods at the premises; and

(e) the physical location and arrangement of areas, structures and plant used for the storage and handling of the dangerous goods at the premises; and

(f) the structures, plant (including the characteristics of the materials used in the plant), systems of work and activities that are not used to store or handle the dangerous goods at the premises but that could interact with the dangerous goods at the premises; and

(g) the chemical and physical reaction between dangerous goods and other substances and articles with which the dangerous goods may come into contact at the premises; and

(h) the type and characteristics of incidents associated with the dangerous goods, including incidents affecting the structures or plant used to store or handle the dangerous goods.

405. Risk assessment

(1) If a hazard is identified under regulation 404, an occupier of premises where dangerous goods are stored and handled must ensure that an assessment is made of the risks associated with the hazard.

(2) Without limiting the generality of sub-regulation (1), the occupier, in conducting an assessment of risk, must have regard to the matters specified in regulation 404(2) so far as they relate to the storage and handling of dangerous goods at the premises.

(3) The occupier must review the assessment--

(a) if there is a significant change to any process or system of work in relation to the storage and handling of dangerous goods: and

(b) if there is evidence to indicate that the risk assessment no longer adequately assesses the risk associated with any hazard; and

(c) if required to do so under regulation 446 as a result of an incident occurring at the premises; and

(d) at intervals of not more than 5 years from the assessment or last review.

(4) The occupier must--

(a) make a record of the assessment and any review of the assessment; and

(b) keep a copy of that record while the assessment is current or being reviewed.

Reference 2

Dangerous Goods (Storage and Handling) Regulations 2000

436. Fire protection –premises exceeding relevant Fire Protection Quantity

(1) If an occupier of premises where dangerous goods are stored and handled in quantities that exceed the relevant quantities specified in the column headed "Fire

Protection Quantity” in the table in Schedule 2 intends to establish a fire protection system for the premises, the occupier must--

(a) request the written advice of the emergency services authority, in relation to the design of the fire protection system for the premises; and

(b) in establishing the fire protection system for the premises, have regard to that written advice.

(2) If--

(a) an occupier to whom sub-regulation (1) applies has implemented recommendations for fire protection made under regulation 313 of the 1989 Regulations; and

(b) those recommendations are still applicable to the types and quantities of dangerous goods stored and handled on the premises and to the conditions under which they are stored and handled—the occupier is deemed to have complied with sub-regulation (1).

(3) Until 1 July 2001, sub-regulation (1) does not apply to an occupier who was not required to obtain and implement recommendations for fire protection by regulation 313 of the 1989 Regulations.

(4) An occupier of premises to which sub-regulation (1) applies must request the written advice of the emergency services authority in relation to the design of the fire protection system for the premises and have regard to that written advice, before--

(a) making modifications to—

(i) any building or structure on the premises; or

(ii) the types or quantities of dangerous goods stored or handled on the premises; or

(iii) the plant or processes, including the introduction of new plant or processes, associated with the storage or handling of dangerous goods--

that require a review of the risk assessment for the premises under regulation 405(3); or

(b) altering the fire protection system on the premises.

Reference 3

Dangerous Goods (Storage and Handling) Regulations 2000

437. Planning for emergencies

(1) This regulation applies in relation to premises where dangerous goods are stored and handled in quantities that exceed the relevant quantities specified in the column headed "Manifest Quantity" in the table in Schedule 2.

(2) An occupier of premises to which this regulation applies must ensure that a written plan for dealing with any emergency associated with the storage and handling of dangerous goods on those premises is--

(a) developed, implemented and maintained; and

(b) communicated to--

(i) persons who are engaged by the occupier to work at the premises and who may be exposed to risk as a result of an emergency; and

(ii) persons in management and control of adjacent premises, if persons or property on the adjacent premises may be exposed to risk as a result of an emergency.

(3) In developing or reviewing the emergency plan, the occupier must--

(a) request the written advice of the emergency services authority; and

(b) have regard to that written advice.

(4) The occupier must ensure that the emergency required under this regulation reduces the risk, so far as is practicable, associated with an emergency.

(5) Without limiting the generality of this regulation, the occupier must ensure that the plan clearly describes the location of the manifest maintained under Subdivision 1 of this Division.

(6) The occupier must review the emergency plan--

(a) if there is a change in circumstances at the premises and the plan no longer complies with sub-regulation (4); and

(b) at intervals of not more than 5 years from the date on which the plan was developed or last reviewed.

Reference 4

Dangerous Goods (Storage and Handling) Regulations 2000

506. Notification to Authority

(1) An occupier of premises where dangerous goods are stored and handled in quantities that exceed the relevant quantities specified in the column headed "Manifest Quantity" in the table in Schedule 2, must ensure that the Authority is notified of the presence of those dangerous goods.

(2) A notification to the Authority under sub-regulation (1) must--

(a) be given within 14 days after the obligation to notify arises; and

(b) include the following information—

(i) the name of the occupier; and

(ii) the address of the premises where the dangerous goods are stored and handled; and

(iii) the occupier's contact details; and

(iv) the nature of the principal activities involving the dangerous goods; and

(v) the Class and the maximum quantity of the dangerous goods stored and handled in bulk or as packaged dangerous goods; and

(vi) descriptions and details and the maximum quantity of any C1 combustible liquids stored and handled in bulk or as packaged dangerous goods; and

(vii) the product name and the maximum quantity of goods too dangerous to be transported.

(3) The occupier must ensure that the Authority is provided with further notification, containing the information required under sub-regulation (2), every 2 years, or at such longer intervals as are specified by the Authority.

SCHEDULE 2 (In Part)

Item	Description of Dangerous Goods	Packaging Group	Placarding Quantity	Manifest Quantity	Fire Protection Quantity
2.	Class 3, 4.1, 4.2, 4.3, 5.1, 5.2, 6.1, or 8	I	50 kg or L	500 kg or L	2000 kg or Litres
II	250 kg or L	2500 kg or L			10000 kg or Litres
III	1000 kg or L	10000 kg or L			20000 kg or Litres
5.	C1 combustible liquids stored and handled with fire risk dangerous goods where none of the Classes, types or Packaging Groups (if any) present exceeds	N/A	1000 kg or L	10000 kg or L	20000 kg or Litres
7.	C1 combustible liquids in bulk stored and handled in isolation from other dangerous goods.	N/A	10 000 L	100 000 L	100 000 Litres