



# Government Gazette

OF

## WESTERN AUSTRALIA

(Published by Authority at 3.30 p.m.)

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No. 48]

PERTH: TUESDAY, 8th JULY

[1980

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Crown Law Department,  
Perth, 20th June, 1980.

THE undermentioned Regulations made under the Explosives and Dangerous Goods Act, 1961-1978, and amended from time to time up to and including the 31st August, 1979, are reprinted as so amended pursuant to the Reprinting of Regulations Act, 1954, by authority of the Attorney General.

R. M. CHRISTIE,  
Under Secretary for Law.

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EXPLOSIVES AND DANGEROUS GOODS ACT, 1961-1978.

### FLAMMABLE LIQUIDS REGULATIONS, 1967.

Published in the *Government Gazette* on the 16th May, 1967 and now reprinted incorporating the erratum published in the *Government Gazette* on the 14th June, 1967, and the amendments thereto published in the *Government Gazette* on the 25th October, 1967; 26th September, 1968; 28th May, 1969; 13th April, 1970; 30th July, 1970; 22nd December, 1972; 11th May, 1973; 12th July, 1974; 24th January, 1975; 14th July, 1978, and the 31st August, 1979, pursuant to the Reprinting of Regulations Act, 1954.



Reprinted pursuant to the Reprinting of Regulations Act, 1954, by authority of the Attorney General dated 20th June, 1980.

## REGULATIONS.

### PART I.—PRELIMINARY.

#### Citation.

1. These regulations may be cited as the Flammable Liquids Regulations, 1967.

#### Commencement.

2. These regulations shall have and take effect on and after the first day of November, 1969.

Amended by  
G.G. 25/10/67,  
p. 2973;  
G.G. 26/9/68,  
p. 2866.

#### Application.

3. (1) These regulations apply to those flammable liquids and oils that pursuant to section 42 of the Act the Governor has by order in council declared to be dangerous goods and classified in any of Sub-classes 3.1, 3.2 and 3.3 of the Third Schedule to the Act or may from time to time so declare and classify.

Amended by  
G.G. 31/8/79,  
p. 2680.

(2) Nothing in these regulations applies to those flammable liquids or oils while being used, processed or manufactured, or to any manufacturing plant or equipment used in connection with any such use, process or manufacture, and in the event of any dispute arising in respect of this subregulation, the decision of the Chief Inspector shall prevail.

#### Arrangement.

4. These regulations are divided into Parts as follows:—

PART I.—PRELIMINARY—Regulations 1 to 5A.

PART II.—TESTING—Regulations 6 to 9.

PART III.—UNLICENSED PREMISES—Regulations 11 to 19.

PART IV.—LICENSED PREMISES—Regulations 20 to 80.

PART V.—CONVEYANCE AND TRANSPORT—Regulations 81 to 121.

PART VI.—MARKING AND LABELLING—Regulations 122 to 125.

PART VII.—PACKING—Regulations 126 to 129.

PART VIII.—FIRE EXTINGUISHING APPARATUS—Regulations 130 to 144.

PART IX.—LICENSING AND CONTROL—Regulations 145 to 158.

Amended by  
G.G. 24/1/75,  
p. 215;  
G.G. 31/8/79,  
p. 2675.

#### Interpretation.

5. In these regulations unless the context requires otherwise—

“approved” means approved by the Chief Inspector;

“bund” means an embankment of earth or a wall of brick, stone, concrete or other approved material, so constructed as to retain the prescribed proportion of the contents of a depot in the event of spillage or leakage, and not less than 150 millimetres high unless otherwise approved;

“compound” means an excavation, hollow or enclosure so constructed as to retain the prescribed proportion of the contents of a depot in the event of spillage or leakage, and not less than 150 millimetres in depth unless otherwise approved;

“drum depot” means a depot for the storage of flammable liquids or oil in packages;

Amended by  
G.G. 13/4/70,  
p. 1057;  
G.G. 12/7/74,  
p. 2685;  
G.G. 24/1/75,  
p. 216;  
G.G. 14/7/78,  
p. 2531;  
G.G. 31/8/79,  
p. 2675 and  
p. 2680.

- “dwelling house” means any building or portion of a building that is used or is intended, adapted or designed for use for living purposes and is a self-contained unit;
- “flammable liquid” means any liquid substance that pursuant to section 42 of the Act has been declared to be dangerous goods and classified in either of Sub-classes 3.1 and 3.2 of the Third Schedule to the Act;
- “in bulk” as applied to flammable liquids or flammable oils means those liquids or oils when kept in a tank;
- “licensed premises” means any premises in respect of which a licence has been issued in accordance with the provisions of these regulations;
- “oil” means any flammable liquid that pursuant to section 42 of the Act has been declared to be dangerous goods and classified in Sub-class 3.3 of the Third Schedule to the Act;
- “outer package” means any carton, box or crate in which packages are contained for purposes of storage or transport;
- “package” means any one individual container for containing flammable liquid or oil of a capacity not more than 250 litres;
- “pipeline” means a pipeline used for conveyance of flammable liquid or oil from one place to another, and includes all hoses, valves, fittings and appliances used in connection with the pipeline; but the term does not apply to pipes that are wholly within any factory or licensed premises;
- “protected work” means—
- (a) any dwelling house, place of worship, public building, school or college, hospital, theatre or any building in which persons are accustomed to assemble;
  - (b) any factory, workshop, office, store, warehouse, shop or building where persons are regularly employed for trade or business;
  - (c) any dock, timber yard, or any part of a harbour or port in which it is customary for ships to berth, moor or lie, and any wharf other than a wharf directly adjoining the premises and controlled by the licensee of the licensed premises;
  - (d) any other place as the Governor may, by notice published in the *Government Gazette*, declare to be a protected work;
- “pump” includes any mechanical equipment used for the dispensing of flammable liquids or oils, irrespective of whether a pump contained in the equipment or not;
- “pump installation” means storage in bulk of flammable liquids that are petroleum products from which the liquid is dispensed directly to the fuel tanks of internal combustion engines;
- “screen wall” means a wall or barrier of a kind capable of preventing the spread of fire and the penetration of vapour, or where so approved in writing pursuant to these regulations a wall or barrier of a kind capable of preventing the penetration of vapour, from one place to another;
- “tank” means any container capable of holding more than 250 litres of flammable liquid or oil;
- “tank depot” means a depot for the storage of flammable liquids or oil in tanks;
- “tank trailer” means a trailer vehicle on which a tank is so mounted, whether permanently or for the time being, as to be sufficiently secured for the purposes of sub-regulation (1) of regulation 82 to the trailer vehicle;
- “tank vehicle” means a vehicle which is either a tank wagon or a tank trailer;

"tank wagon" means a vehicle on which a tank is so mounted, whether permanently or for the time being, as to be sufficiently secured for the purposes of subregulation (1) of regulation 82 to the vehicle, and includes an articulated vehicle;

"the Act" means the Explosives and Dangerous Goods Act, 1961;

"vehicle" means a conveyance used on public roads and includes articulated vehicles that are so used.

5A. Where a boundary, building or other thing conformed to the measurements prescribed by these regulations as in force immediately before the coming into operation of the Flammable Liquids (Metric Conversion Amendments) Regulations, 1974, it shall not be regarded as failing to conform to the requirements of these regulations as to measurement by reason only of the amendments to these regulations effected by the Flammable Liquids (Metric Conversion Amendments) Regulations, 1974.

Added by  
G.G. 12/7/74,  
p. 2685.

#### PART II.—TESTING. Determination of Flash Point.

6. The nature of the test apparatus for determining the flash point of substances and the method of performing the test shall be in accordance with Australian Standard 2106—1977. Determination of the Flashpoint of Flammable Liquids (Closed Cup), as from time to time amended.

Substituted  
by  
G.G. 31/8/79,  
p. 2675.

7. The Abel apparatus shall be used for determining the flash point of all substances having flash points of 50° Celsius or less than 50° Celsius, and for substances having flash points above 50° Celsius the Pensky-Martens closed flashpoint tester shall be used.

Amended by  
G.G. 12/7/74,  
p. 2686;  
G.G. 31/8/79,  
p. 2675.

8. Standard models of both the Abel apparatus and the Pensky-Martens closed flashpoint tester shall be kept by the Chief Inspector.

9. (1) Every flash point test for which a certificate is issued and for which the prescribed fee is charged shall be carried out by a qualified person.

(2) A qualified person referred to in this regulation means a person possessed of a Diploma or University degree in Chemistry, or otherwise an Associate of the Royal Australian Chemical Institute.

10. [*Revoked by G.G. 31/8/79, p. 2675.*]

#### PART III.—UNLICENSED PREMISES.

11. Unless stored at premises licensed under the Act for their storage, flammable liquids and oils shall be stored or kept pursuant to the provisions of this Part of these regulations.

Substituted  
by  
G.G. 31/8/79,  
p. 2675.

12. (1) Flammable liquids of Sub-class 3.1, whether for private use or for sale, may be stored so that—

Substituted  
by  
G.G. 31/8/79,  
p. 2675-6.

- (a) the total quantity does not exceed 230 litres;
- (b) not more than twenty-five litres are stored in an outhouse or garage attached to a dwelling house but separated therefrom by a partition having a fire rating of at least one hour; and
- (c) not more than five litres are stored in a dwelling house or in an outhouse or garage attached thereto but not separated therefrom by a partition having a fire rating of at least one hour.

(2) Flammable liquids of Sub-class 3.2, whether for private use or for sale, may be stored so that—

- (a) the total quantity does not exceed 1.2 kilolitres;

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- (b) not more than fifty litres are stored in an outhouse or garage attached to a dwelling house but separated therefrom by a partition having a fire rating of at least one hour; and
- (c) not more than twenty-five litres are stored in a dwelling house or in an outhouse or garage attached thereto but not separated therefrom by a partition having a fire rating of at least one hour.

(3) Oils, whether for private use or for sale, may be stored so that—

- (a) the total quantity does not exceed 1.2 kilolitres;
- (b) not more than one hundred litres are stored in an outhouse or garage attached to a dwelling house but separated therefrom by a partition having a fire rating of at least one hour; and
- (c) not more than fifty litres are stored in a dwelling house or in an outhouse or garage attached thereto but not separated therefrom by a partition having a fire rating of at least one hour.

Amended by  
G.G. 12/7/74,  
p. 2686;  
G.G. 31/8/79,  
p. 2676 and  
p. 2680.

13. (1) Subject to subregulation (2) of this regulation, flammable liquids or oils may be stored in total quantity not exceeding five kilolitres of each Sub-class, whether in bulk or otherwise, if those liquids and oils are not for resale and the storage is on land that has an area exceeding four hectares and is used or intended to be used by the occupier for agricultural, horticultural, floricultural or pastoral purposes, and the following conditions are complied with:—

- (a) The storage is not less than fifteen metres distant from any dwelling house.
- (b) The storage is not less than fifteen metres distant from the boundary of the land, from any protected work and from any public way.
- (c) The ground around the storage is kept clear of all combustible matter for a distance of not less than six metres.

(2) Where the area of land referred to in subregulation (1) of this regulation exceeds two hundred hectares, the total quantity of flammable liquids or oils of each Sub-class that may be stored thereon shall be increased by five kilolitres for each two hundred hectares, but each storage shall be at least five hundred metres distant from any other storage, and shall comply with the provisions of subregulation (1) of this regulation.

Amended by  
G.G. 13/4/70,  
p. 1057;  
G.G. 12/7/74,  
p. 2686;  
G.G. 31/8/79,  
p. 2676.

14. (1) Oils may be stored—

- (a) in any quantity, whether in bulk or otherwise, if any quantity in excess of 1.2 kilolitres is separated from any protected work by the distance specified in Table 2 appended to regulation 37 of these regulations that is applicable to the case and all other requirements of these regulations for the storage of oils are complied with; or
- (b) in a tank that is attached to or forms part of an installation for the storage and application of fuel oil where—
  - (i) that tank is installed within a tank chamber in accordance with Clause 4.10 of Australian Standard 1940-1976, as from time to time amended; or
  - (ii) that tank has been installed in an approved manner and the Chief Inspector approves of such storage being on premises that are not licensed.

(2) The Chief Inspector may approve any storage of oils without licence where in his opinion the storage is so effected as not to constitute a danger to life or property by fire or explosion.

15. Flammable liquids or oils may be stored in any quantity if they are goods that constitute a paint, lacquer, enamel, insecticide, polish or similar manufactured product, and the following conditions are complied with:—

Amended by  
G.G. 12/7/74,  
p. 2686;  
G.G. 31/8/79,  
p. 2680.

- (a) The liquid or oil is contained in packages the individual liquid capacity of which does not exceed twenty-three litres.
- (b) Not more than ten per centum of the total quantity of the liquids and oils so stored is of Sub-class 3.1.
- (c) The building in which the liquids or oils are stored is of a construction approved for the purpose by the building surveyor or other appropriate officer of the municipality in which the building is situated and by the Chief Officer of the Western Australian Fire Brigade.
- (d) The building is not a dwelling house or so attached to a dwelling house as to form part of the building.
- (e) There are provided and installed in the building such general fire extinguishing systems or hand fire extinguishers as are recommended by the Chief Officer of the Western Australian Fire Brigades.

16. (1) Flammable liquids and oils, whether in bulk or otherwise, may be stored for use in connection with the work of mining, road or railway construction, bridge-building, or similar work if the following conditions are complied with:—

Amended by  
G.G. 12/7/74,  
p. 2686.

- (a) The storage is not less than fifteen metres from a public road and not less than thirty metres from any protected work.
- (b) Reasonable precautions are taken to prevent any fire from reaching the storage.
- (c) Any special directions of an inspector that are not inconsistent with these regulations are observed and carried out.

(2) Notwithstanding subregulation (1) of this regulation, the storage referred to therein shall not continue in one location for a period exceeding six months unless application is made for a licence pursuant to regulation 146 of these regulations, in which event the Chief Inspector may grant a licence or if he considers it is in the interest of safety so to do permit the storage to continue without licence for such period as he thinks fit.

16A. The Chief Inspector may by notice in writing, approve the storage of either flammable liquids or flammable liquids and oils without licence, for any period not exceeding six months, where he considers the storage is necessary.

Added by  
G.G. 13/4/70,  
p. 1057.

17. Flammable liquids of Sub-class 3.1 and flammable liquids of Sub-class 3.2 may be stored in respective quantities not exceeding 410 litres or 700 litres if those liquids are stored in a fuel tank that forms part of and is used in connection with a permanently installed machine, internal combustion engine, or other approved permanent installation.

Amended by  
G.G. 12/7/74,  
p. 2686;  
G.G. 31/8/79,  
p. 2680.

18. Flammable liquids and oils may be stored in any quantity—

- (a) while being conveyed on a vehicle in accordance with the provisions of Part V of these regulations, or on any vessel or railway; or
- (b) when contained in a fuel tank of a vehicle, vessel, locomotive or aircraft.

19. (1) In all places where flammable liquids or oils are stored without licence by virtue of the exemptions conferred in this Part of these regulations, all reasonable precautions shall be taken for the prevention of accident by fire or explosion, and all liquids or oil so stored shall be packed, marked and labelled in accordance with these regulations.

(2) All packages so stored shall be kept securely closed, except while in actual use, and all storage tanks shall be constructed in accordance with the provisions of these regulations.

#### PART IV.—LICENSED PREMISES.

Erratum in *G.G.* 14/6/67, p. 1599. 20. All premises where flammable liquids or oils are stored otherwise than in the manner and quantities prescribed in sub-regulation (2) of regulation 3, and Part III of these regulations shall be licensed.

21. Any premises occupied by the one occupier may include any number of tank or drum depots for the keeping of flammable liquids or oils as specified in the licence, and all areas and buildings adjoining each other and occupied by the same occupier shall be deemed to be the same premises and be included in one licence.

#### General Provisions for all Licensed Premises.

22. All flammable liquids and oils stored in depots on licensed premises shall be contained in packages or tanks that conform to the provisions of these regulations, and shall be marked and labelled as required by these regulations.

Substituted by *G.G.* 31/8/79, p. 2676. 23. All electrical wiring and equipment installed in or brought into any depot shall comply with the provisions for installation in hazardous locations, of Australian Standard 3000, Part 1—1976, as from time to time amended.

Amended by *G.G.* 12/7/74, p. 2686. 24. Except where flammable liquids or oils are stored wholly in underground tanks, there shall be displayed at every licensed depot and on all licensed premises one or more notices to read "DANGER, NO SMOKING, NO NAKED LIGHTS" in red lettering on a white ground and of such a size as to be easily legible from a distance of fifteen metres or of such alternative wording and size as may be approved by an inspector.

25. On every licensed premises there shall be kept available for immediate use hand fire extinguishers of the type and capacity specified in Part VIII of these regulations for the particular kind of storage, and in depots where there is a risk of spillage, there shall also be kept a supply of dry clean sand for throwing on any spilt liquid.

Amended by *G.G.* 12/7/74, p. 2686; *G.G.* 31/8/79, p. 6280. 26. Where on licensed premises there are held stocks of drums having an individual capacity exceeding twenty-three litres that contain vapours or residues of flammable liquid of Sub-class 3.1, the drums shall be stored—

(a) in a depot approved under the licence for storage of flammable liquids; or

(b) in the open air in a manner approved by an inspector:

but where the drums are stored in the open air, no combustible matter shall be permitted to remain within three metres of any such drum and the storage shall not be within six metres of any dwelling house.

Amended by *G.G.* 12/7/74, p. 2686. 27. The area surrounding any above-ground depot situated in the open shall be kept clear of vegetation or combustible matter for a distance of not less than three metres unless a screen wall intervenes.



28. (1) No explosive nor any dangerous goods of Class 5 shall be stored or kept on any licensed premises except in such quantity and such manner of storage as may be approved by the Chief Inspector in writing. Amended by  
G.G. 31/8/79,  
p. 2676.

(2) No other goods having flammable, combustible or explosive properties shall be stored in depots unless an inspector has approved of such storage.

29. Where on any licensed premises it is necessary to carry on any process or operation involving naked flame or a source of ignition, that process or operation shall be separated by a screen wall or by an approved safe working distance from any place where flammable liquids are stored in above-ground depots, handled or dispensed; otherwise a person shall not do any act whatever in licensed premises that may be likely to cause fire or explosion.

30. All flammable liquids kept in licensed premises, except such quantity thereof as is required for immediate use, shall be kept in the depots appropriate for the purpose; provided nevertheless that quantities not exceeding those exempt under the provisions of Part III of these regulations may also be kept elsewhere on the premises.

31. A person under the age of 14 years shall not be allowed in licensed depots unless under the immediate supervision of a responsible adult person appointed by the licensee for the purpose.

32. All flammable liquids received at licensed premises shall be taken to the appropriate depot without delay, and all such goods taken from a depot for delivery or otherwise, except any required for immediate use, shall be promptly removed from the premises; but this regulation does not apply to any liquids kept other than in depots as provided in regulation 30 of these regulations.

33. Where so required by the Chief Inspector licensed premises or licensed depots shall be surrounded by an approved type of fencing to prevent unauthorised entry.

33A. A screen wall required to be provided by these regulations shall be constructed and placed in a manner approved by the Chief Inspector. Added by  
G.G. 13/4/70,  
p. 1057.

#### Storage in Drum Depots.

34. Drum depots shall be of the types prescribed by this regulation, but the Chief Inspector may approve the use of any other drum depot if it complies with the requirements of these regulations relating to drum depots. Amended by  
G.G. 12/7/74,  
p. 2686;  
G.G. 31/8/79,  
p. 2676.

- (1) Type A: Depots where packages are stored in the open and surrounded by a bund or provided with a compound. The bund or compound shall be designed so as to have a liquid holding capacity not less than 25% of the total storage for which the depot is licensed. Such depots may, and if required shall, in accordance with regulation 33 of these regulations, be surrounded by a fence and may include a roofed lock-up area for the safe custody of packages within the banded area; but a drum depot in which drums or packages are filled and which is raised above ground level so as to permit direct loading of packages onto road vehicles shall have a screen of brick, concrete or metal sheet erected to the floor level of the depot along the loading face with return wings for at least 1.5 metres on the adjoining sides. The bund enclosure shall be adequately ventilated so that vapours are dispersed to the open air.

- (2) Type B: Depots that consist of a closed building having all entrances thereto capable of being securely locked and used exclusively for storage of flammable liquids or oils in packages. Such depots shall be constructed of approved materials and be surrounded by a bund wall designed so as to have a liquid holding capacity not less than 25 per cent of the maximum storage for which the depot is licensed, but where the walls of the depot are of brick or concrete such walls may form a part of the bund if there is also a raised sill across the doorway. All such depots shall be ventilated to the satisfaction of the Chief Inspector so as to disperse flammable vapour to the open air.
- (3) Type C: Depots constructed within a building. Such depots shall have walls and floor of brick, stone or concrete, and roof of reinforced concrete and shall be fitted with an approved fire door when opening to the interior of the building. There shall be no other opening from the depot to the interior of the building. Such depots are subject to the following special provisions:—
- (a) They shall be compounded by having the floor sunk to a level below that of the adjoining floor or by means of a surrounding sill of brick or concrete of which the outer walls may form a part. The depth of the compounding shall be not less than 300 millimetres unless otherwise approved and be sufficient to contain the whole of the licensed capacity of the depot.
  - (b) They shall, where possible, have the door opening to the outside of the building and to the open air.
  - (c) There shall be fitted a shaft ventilator of fire resistant material extending from a point seventy-five millimetres above floor level and fitted with fire-proof sealing where it passes through the roof or wall of the depot. Such ventilating shafts shall not pass to a height above the highest part of the building or of any adjoining building that is within six metres of the vent outlet. Ventilating shafts shall not pass through any other part of the same building but shall be so designed as to pass directly from the depot to the open air and shall be fitted at the outer discharge end with an approved cowl. Other means of maintaining adequate ventilation shall be provided if so required by the Chief Inspector.
  - (d) No such depot shall be permitted in a basement of any building.
  - (e) No such depot shall, without special approval being given by the Chief Inspector, be within a building that is a dwelling house, place of worship, school, hospital, theatre or any public building in which persons are accustomed to assemble.
  - (f) No such depot that is within another building shall be licensed for more than the following quantities, except when specially approved by the Chief Inspector and subject to any additional requirements which he may specify:—

Flammable Liquid: Sub-class 3.1—2.5 kilolitres.

Sub-class 3.2—5 kilolitres.

Oils: Sub-class 3.3—10 kilolitres.

Provided however that if Sub-class 3.1 liquids are stored with those of Sub-class 3.2 or with oils, the whole shall be regarded as if it were a storage of Sub-class 3.1 liquids.

## General Rules for Drum Depots.

35. The general provisions applicable to licensed premises as set out in regulations 22 to 33A (both inclusive) of these regulations apply to drum depots to such extent as may be applicable to the particular type of drum depot.

Amended by  
G.G. 13/4/70,  
p. 1057.

36. In all licensed drum depots the following rules shall be observed:—

Amended by  
G.G. 12/7/74,  
p. 2686.

- (a) Flammable liquids or oils shall not be kept in any depot in quantity exceeding that specified in the licence.
- (b) All packages containing flammable liquid or oil shall, unless required for immediate use, be kept in the depot, but this paragraph does not apply to a quantity not exceeding that which may be stored without licence or to such liquids or packages that are otherwise exempt under these regulations.
- (c) No goods of any kind, other than flammable liquids or oils, shall be kept in the depot without approval of an inspector.
- (d) No petrol-driven engine shall at any time be used within the bunded area of the depot.
- (e) Compression ignition engines may be used within a depot provided they are started either manually or by means of compressed air and the exhaust system is kept cool and exhaust gases are discharged through water. No engine shall be started electrically while it is within the bunded area and any electric starting system shall have a cut out switch for the battery. The switch shall be readily accessible and shall remain in the open position while the engine is within the depot. The battery shall be protected by a cover of non-conductive material. Appliances or equipment having any other form of motive power shall not be used within a depot unless of an approved type.
- (f) Any shelving, racks, and like fittings in the depot shall be constructed of metal or otherwise of hardwood not less than twenty-five millimetres in thickness, and packages shall be so stacked that no package is liable to fall outside of the bunded area either in the event of fire or otherwise.
- (g) Water shall not be allowed to accumulate within the bunded area of a drum depot, and any drains or pumps that are provided shall conform with the requirements of regulation 54 of these regulations.
- (h) There shall be provided in or adjacent to the depot, one or more hand fire extinguishers of the type and capacity specified in Part VIII of these regulations, which extinguishers shall be mounted in conspicuous positions where they are easily accessible.
- (i) Where any drum depot consists of a platform or building having floor above ground level, the ground underneath shall at all times be kept clear of combustible matter and vegetation and no goods of any kind shall be kept under the platform of such a depot.

37. (1) Every drum depot included in the licence for the licensed premises, other than a depot within a building, shall be separated from protected works by a prescribed distance as set out in Tables 1 and 2 appended to this regulation; subject however to the following provisions:—

Amended by  
G.G. 12/7/74,  
p. 2686;  
G.G. 31/8/79,  
p. 2680.

- (a) The Chief Inspector may authorise a reduced distance in any case where the full distance cannot be observed but the natural features of the ground or the nature and extent of screen walls or other conditions together with the distance that can be observed give a degree of protection equal to that of the full distance prescribed.
- (b) The Chief Inspector may approve a reduced distance from a protected work that is situated within the boundaries of the licensed premises.

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- (c) Where the walls of a Type B depot are of the nature of screen walls, the depot shall be regarded as if it were separated by a screen wall.
- (d) The Chief Inspector may require a greater distance from a dwelling house or from a protected work that is open to the public if he considers it necessary for safety of the public.
- (e) No drum depot shall be less than three metres distant from a protected work situated outside the boundaries of the licensed premises.
- (2) A drum depot on licensed premises, other than a depot within a building, shall be located within boundaries of the premises in accordance with the following:—
- (a) The distance from the boundary shall, except as provided in paragraph (b) of this subregulation, be that given in Tables 1 and 2 appended to this regulation for the maximum quantity and Sub-class of liquid for which the depot is licensed, but the Chief Inspector may, at his discretion, approve a reduced distance.
- (b) A depot may with the approval of the Chief Inspector be constructed on a boundary which adjoins a road street or other approved open place if a screen wall is erected on the boundary to the full height of the depot and in an approved manner so as to protect the storage from any source of ignition outside the boundary.
- (3) Where there are two or more drum depots on the same licensed premises, the distance between any two of them shall be the distance ascertained from Tables 1 and 2 to this regulation by assuming the larger depot to be a protected work, subject however to the provisions of paragraph (b) of subregulation (1) of this regulation.

Amended by  
G.G. 31/8/79,  
p. 2680.

TABLE 1.  
Separation distances from Protected Works.

Storage of Sub-class 3.1 or of Sub-class 3.1 with any of Sub-class 3.2 or Sub-class 3.3 in the Same Depot

Distance not less than	No Screen Wall. In quantity exceeding 230 litres but not exceeding—	Separated from Protected Works by a screen wall. In quantity exceeding 230 litres but not exceeding—
	Metres	Kilolitres
3	1	4
4	2	8
5	4	16
6	7	28
7	10	40
8	14	56
9	20	80
10	26	104
11	34	136
12	42	168
13	52	208
14	64	256
15	77	308
20	170	680
25	310	1 240
30	500	2 000 and over
35	750	
40	1 100	
45	1 500	
50	2 000 and over	

Provided that the distances shown above may be altered proportionately for intermediate quantities.

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TABLE 2.  
Separation distance from Protected Works.  
Storage of Sub-class 3.2 or of Sub-class 3.2 and Sub-class 3.3  
in the Same Depot

Amended by  
G.G. 31/8/79,  
p. 2680.

Distance not less than	No Screen Wall. In quantity exceeding 1 200 litres but not exceeding—	Screen Wall intervening. Quantity exceeding 1 200 litres but not exceeding—
Metres	Kilolitres	Kilolitres
3	4	8
4	8	16
5	16	32
6	28	56
7	40	80
8	56	112
9	80	160
10	104	208
15	308	616
20	680	1 360
25	1 240	2 480 and over
30	2 000 and over	

Provided that the distances shown above may be altered proportionately for intermediate quantities.

#### Storage in Bulk—Tank Depots.

38. Tanks for flammable liquids and oils shall be designed and constructed in accordance with an approved specification, standard or code for tank construction and of steel plate or other material that is approved for the purpose; and unless otherwise approved, tanks shall be installed in open places and may be above ground level or underground.

Amended by  
G.G. 31/8/79,  
p. 2676.

39. [Revoked by G.G. 31/8/79, p. 2676.]

40. There shall be sufficient ullage space above the liquid in a tank to allow for expansion of the contents when the tank is filled to its rated capacity.

#### Tanks above Ground Level.

41. (1) All above-ground tanks for flammable liquids or oils, other than tanks on vehicles, shall be set upon firm foundations and any supporting structures thereof shall be of fire-resistant material.

Amended by  
G.G. 12/7/74,  
p. 2687;  
G.G. 31/8/79,  
p. 2676.

(2) All such tanks shall be electrically earthed and no combustible material shall be permitted to remain under or within three metres of a tank.

(3) All above-ground tanks for flammable liquids, other than tanks on vehicles, shall be enclosed by a wall, fence or other approved barrier to prevent public access.

(4) Any above-ground tank that has been used for the storage of any flammable liquid or oil, but has not been so used within the immediately preceding three months, shall be—

- (a) rendered safe in accordance with subregulation (3) of regulation 73 as if it were a tank referred to in that subregulation; or
- (b) if so required by the Chief Inspector, remove to a bulk storage depot licensed for the storage of flammable liquids and kept there until that tank is again to be so used.

Amended by 42. (1) Above-ground tanks shall be fitted with adequate vents  
*G.G. 12/7/74,* at a height not less than four metres above ground level, or such  
*p. 2687;* other height as is approved, to permit pressure or vacuum release  
*G.G. 31/8/79,* when filling or discharging operations are in progress, or for any  
*p. 2677.* temperature changes due to climatic conditions, and open vents  
 shall be protected either by fitting an approved flame arrester or  
 a screen of metallic gauze of at least twelve meshes to the linear  
 centimetre. Vents that are fitted with gauze shall be cleaned at  
 appropriate intervals to ensure that the passage of air through the  
 gauze is unrestricted.

(2) Every above-ground tank for flammable liquid shall be so  
 constructed as to ensure that any excessive internal pressure caused  
 by exposure to fires likely to cause rupture of the tank shell or  
 bottom will be effectively relieved, and in the case of a vertical  
 tank such construction may be in the form of a floating roof, a  
 lifter roof, a weak roof-to-shell seam, or other approved pressure-  
 relieving device.

#### Separation of Tanks from Protected Works.

43. Above-ground tanks for the storage of flammable liquids  
 shall be separated from protected works by distances which shall  
 be not less than those set out in Tables 1 and 2 appended to  
 regulation 37 of these regulations; subject however to the follow-  
 ing provisions:—

- (a) The Chief Inspector may approve a reduced distance in any  
 case where the full distance cannot be observed, if the  
 natural features of the ground or the nature and extent  
 of screen walls or other conditions together with the dis-  
 tance that can be observed give a degree of protection  
 equal to that of the full distance prescribed.
- (b) The Chief Inspector may approve a reduced distance from  
 a protected work that is situated within the boundaries of  
 the licensed premises.
- (c) Where two licensed premises held by different licensees  
 adjoin on a common boundary, the Chief Inspector may with  
 the written consent of both licensees approve a reduced  
 distance between any tank depot or drum depot on one  
 of such premises and any such depot or protected works on  
 the adjoining licensed premises; but such reduced distance  
 shall not be less than that which would be prescribed if  
 both premises were one licensed premises.
- (d) The Chief Inspector may require a greater separation dis-  
 tance from a protected work that is used by the public if  
 he considers it necessary for the safety of the public.

#### Separation Distances for Tanks within the same Premises.

Amended by 44. (1) Tanks for storage of flammable liquids within the same  
*G.G. 12/7/74,* tank depot or in separate tank depots on the same licensed premises  
*p. 2687.* shall be located in accordance with the provisions of Tables 3 and  
 4 appended to this regulation, but the Chief Inspector may approve  
 reduced distances for above-ground tanks in cases where the pre-  
 scribed distances cannot be observed, or where such reduced dis-  
 tances together with the natural features of the ground, the nature  
 and extent of screen walls and any other conditions will give a  
 degree of protection equal to that of the prescribed distance.

(2) In Tables 3 and 4 appended to this regulation an elevated  
 tank means a tank that is raised above the ground level by a height  
 exceeding two metres as measured from the ground to the lowest  
 part of the tank.

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TABLE 3.

Premises for which the Total Licensed Storage of Flammable Liquids and Oils does not Exceed 3 000 kilolitres.

Type of Tank	Minimum Separation Distances.		
	Between Tanks in the same depot	Between Tanks and Drum Depots	Between Tanks and outer boundary of premises
Buried	To be governed solely by constructional and operational conditions	1.8 metres	1.8 metres
Ground Level		6 metres	As provided in Regulation 49
Elevated		6 metres	As provided in Tables 1 and 2, but not less than 6 metres for any tank

TABLE 4.

Premises for which the Total Licensed Storage of Flammable Liquids and Oils exceeds 3 000 kilolitres capacity.

Type of Tank	Minimum Separation Distances.		
	Between Tanks in the same depot	Between Tanks and Drum Depots	Between Tanks and outer boundary of premises
Above ground	Dia. of smaller tank or 15 metres whichever is the less	Dia. of tank or 15 metres whichever is the less	15 metres Provided that the Chief Inspector may approve a reduced distance which is not less than 9 metres.

Provided that any buried tanks or elevated tanks may be located as prescribed in Table 3.

#### Bunding of Tank Depots.

45. Every above-ground tank depot for storage of flammable liquids shall be surrounded by a bund wall of earth, bricks, concrete or stone so constructed as to be liquid-tight and to withstand a full hydraulic head, and the slope of the walls shall be consistent with the angle of repose for the materials of constructions.

46. Where the tank depot consist of one above-ground tank for flammable liquid, the capacity of the banded area shall be at least equal to the storage capacity of the tank.

47. In licensed premises where flammable liquids or flammable liquids and oils are stored in excess of a total of 3 000 kilolitres, the tanks shall be located in accordance with the provisions of Table 4 appended to regulation 44 of these regulations and shall be surrounded by a main bund wall providing a capacity not less than the whole of the largest tank within the depot, together with ten per centum of the combined capacities of all other tanks within the depot; but the Chief Inspector may require the bund capacity to be the whole of the largest tank together with fifty per centum of the combined capacities of all other tanks in the depot when he considers such additional bunding to be necessary for safety of the public or of adjoining property.

Amended by  
G.G. 12/7/74,  
p. 2688;  
G.G. 24/1/75,  
p. 216.

Amended by *G.G. 31/8/79*, p. 2680. 48. If an above-ground tank depot is intended only for the storage of Sub-class 3.2 flammable liquids or of both Sub-class 3.2 flammable liquids and oils, the distances as prescribed in Table 3 and Table 4 appended to regulation 44 of these regulations and bund capacity specified in regulations 46 and 47 of these regulations may be modified with the approval of the Chief Inspector.

Amended by *G.G. 12/7/74*, p. 2688. 49. (1) In an above-ground tank depot where the total storage does not exceed 3 000 kilolitres, the spacing between tanks may be governed solely by constructional and operational conditions.

(2) The group of tanks in such tank depot shall then be regarded as one tank for the purposes of ascertaining the bund capacity which shall be not less than the full capacity of all tanks in the group.

(3) A group of tanks which under the provisions of subregulation (2) of this regulation is regarded as one tank shall be separated from the boundaries of the premises by the distance given in Table 1 or Table 2 appended to regulation 37 of these regulations for the total capacity of all tanks in the group except that if the total capacity exceeds seventy-seven kilolitres the distance may be fifteen metres from the boundary to the nearest tank; but the distance from protected works as prescribed in those Tables 1 and 2 shall still apply.

(4) The Chief Inspector may approve distances less than those required under subregulation (3) of this regulation in any particular case where he is of opinion that there is no danger to adjoining property.

Amended by *G.G. 12/7/74*, p. 2688. 50. Where the aggregate capacity of the tanks storing flammable liquids or oils inside a bund exceeds 9 100 kilolitres, intermediate fire walls at least equal to half the height of the main bund walls or 600 millimetres in height, whichever height is the less, shall be provided to divide the tankage into groups not exceeding that quantity.

Amended by *G.G. 12/7/74*, p. 2688. 51. The Chief Inspector may limit the total aggregate volume of flammable liquids and oils that may be stored within any one banded area to a maximum of 41 000 kilolitres.

Amended by *G.G. 12/7/74*, p. 2688. 52. (1) A tank containing any oil, when located within a banded area, shall be separated from any other tank in the compound by the distance specified in Table 3 or Table 4 appended to regulation 44 of these regulations according to the total storage for which the premises are licensed, and shall be subject to all provisions of these regulations relating to above-ground tanks.

(2) A tank used exclusively for the storage of any oil may be located outside a banded area subject to approval of the Chief Inspector and provided that the distance from any adjacent above-ground tank containing flammable liquid is either fifteen metres or such lesser distance as having regard to the circumstances the Chief Inspector may approve.

(3) An above-ground tank for the storage of any oil shall be banded whenever required so to be by the Chief Inspector.

(4) A tank containing any oils shall be included in the licence for premises where flammable liquids are stored in tanks, unless otherwise exempt under regulation 14 of these regulations.

Amended by *G.G. 12/7/74*, p. 2688; *G.G. 31/8/79*, p. 2677. 53. (1) A tank depot that is connected to a filling station or to a drum depot for the purpose of filling flammable liquids into containers or into tanks shall be separated from that filling station or drum depot by an approved distance.

(2) Any such filling station or drum depot, where drums or tanks are filled by supply from a tank depot, shall be located so that the filling point is not less than fifteen metres distant from the boundary of the premises unless a screen wall intervenes, but the Chief Inspector may approve a lesser distance for a small tank depot where the full distance cannot be observed.



(3) Any such filling station or drum depot may be located immediately inside a boundary that adjoins a road, street or other approved open place if the filling station or drum depot is fully protected in an approved manner by a screen wall erected on the boundary.

(4) A person shall not dispense any flammable liquid into a container the capacity of which exceeds seventy litres unless—

- (a) at a filling station approved for that purpose, or a drum depot so approved; or
- (b) the container is the fuel tank of a motor vehicle and the displaced vapours are vented to a position outside the vehicle.

54. (1) Water shall not be allowed to accumulate in the compound of a tank depot.

(2) There shall be provided means whereby water may be drained from the compound and such means of draining shall be kept closed except when water is actually being removed from the compound.

(3) Where any pump is used for the purpose of removing water from the compound, such pump shall not be self-starting.

55. The drains from a compound shall be so designed and constructed, whether by use of liquid traps or otherwise, that flammable liquids and oils will be separated and retained in such manner as to prevent any flammable liquid or oil entering natural water courses, public sewers, drains or public thoroughfares.

56. At every above-ground tank depot where flammable liquids are stored, there shall be provided and maintained in good working order such equipment and appliances for the prevention and extinguishing of fire as are prescribed in Part VIII of these regulations.

#### Underground Tanks.

57. An underground tank for the storage of flammable liquids or oils means, for the purposes of these regulations a tank that has not less than half its rated capacity buried below the surface of the ground and that is completely covered by an earth cover.

58. (1) All underground tanks for storage of flammable liquids or oils shall be placed not less than 600 millimetres below the surface of the ground or otherwise covered by at least 600 millimetres of earth, and be so located with respect to existing building foundations and supports that the loads carried by those foundations or supports cannot be transmitted to the tank.

Amended by  
G.G. 12/7/74,  
p. 2688.

(2) The distance from any part of an underground tank storing flammable liquid to the nearest wall of any basement, pit, or cellar shall be not less than 300 millimetres, and from any property line that may be built upon, not less than 1.8 metres, and the distance from any part of an underground tank storing oils to the nearest wall of any basement, pit, cellar, or property line shall be not less than 300 millimetres.

(3) Underground tanks for flammable liquids, except those within or under buildings, shall be separated from each other and from boundaries and other depots by distances not less than those given for buried tanks in Table 3 appended to regulation 44 of these regulations.

59. (1) Underground tanks for the storage of flammable liquids or oils shall be set on firm foundations and be surrounded with clean sand well tamped into place.

Amended by  
G.G. 12/7/74,  
p. 2688.

(2) Underground tanks that are, or are likely to be, subjected to traffic shall be protected against damage from vehicles passing over them by not less than 900 millimetres of earth cover, or alternatively not less than 600 millimetres of cover if the cover includes 120 millimetres of reinforced concrete or other approved paving material, and if reinforced concrete or other paving is used as part of the protection, it shall extend at least 300 millimetres horizontally beyond the extremities of the tank in all directions.

60. No bund wall or compounding shall be required for any tank of which half the capacity is below the surface of the ground and the remainder covered with earth in the manner prescribed by these regulations; and such a tank is for the purpose of these regulations regarded as an underground tank.

Amended by  
G.G. 12/7/74,  
p. 2688.

61. (1) An underground tank for flammable liquid shall not be located under a building without special approval of the Chief Inspector.

(2) Where approval pursuant to subregulation (1) of this regulation is given, the underground tank shall—

- (a) be fully enclosed in a box of reinforced concrete with sand filling not less than 600 millimetres around the tank, and with the lid of the box and all openings for pipes so sealed as to be liquid and vapour tight at all times; and
- (b) have the fill pipe opening so located that the tank can be filled from a tank vehicle standing in the open outside the building.

62. If and when the Chief Inspector so requires, a tank for flammable liquid that is located under a building in accordance with regulation 61 of these regulations shall be fitted with an approved gauge by which the liquid level in the tank can be observed by an operator while engaged in the operation of supplying flammable liquid to the underground tank, and such gauge when installed shall be maintained in efficient working order at all times.

63. A tank for the storage of flammable liquid shall not be located in a basement under a building except with special approval being given by the Chief Inspector and subject to such special conditions of installation as the Chief Inspector may require.

64. All underground tanks for the storage of flammable liquids shall be provided internally with a steel pad at a point immediately beneath the dip pipe to prevent injury to the tank by the dip stick, or be otherwise designed and fitted so that the internal surface will not be damaged while the tank is in normal use.

65. Before installation of an underground tank for the storage of flammable liquid or oils, the nature of the ground and the drainage therefrom shall be taken into account and the setting of the tank shall then be made in accordance with recommendations of the Marketing Safety Code of the Institute of Petroleum.

Substituted  
by  
G.G. 31/8/79,  
p. 2677.

66. Before installation every underground tank for the storage of flammable liquid or oil shall be tested for leakage in accordance with clause 2.7 of Australian Standard 1962-1975, as from time to time amended, and before it is used for storage such tank shall have been certified by the person installing it to be free of leakage.

67. Every underground tank for the storage of flammable liquid shall be placed below the level of any piping connected to the tank, and all pipes shall enter through the top of the tank.

Amended by  
G.G. 12/7/74,  
p. 2688;  
G.G. 31/8/79,  
p. 2677.

68. (1) Every underground tank shall be fitted with a vent pipe of not less than twenty-five millimetres internal diameter so located that the discharge point is outside of buildings, higher than the fill pipe opening and, unless otherwise approved, not less than four metres above the level of the ground covering the tank, and the discharge end shall be at least two metres from any fire escape and not nearer than two metres measured both horizontally and vertically, from any window or other opening in a building.

(2) A vent pipe shall terminate in one or more return bends or other approved fitting with an opening of which the area shall be double the area of the pipe section, and every such opening shall be covered with brass wire gauze of at least twelve meshes to the linear centimetre and so fitted that it can be removed for cleaning.

(3) The vent pipes from two or more tanks storing the same class of liquid may be connected to a common vent pipe if the point of connection is at least 300 millimetres above the level of the highest part of any tank so connected, and in such case the outlet pipe shall be one pipe-size larger than the largest individual vent pipe connected thereto.

(4) The lower end of a vent pipe shall enter the tank through the top and shall not extend into the tank more than twenty-five millimetres.

69. The fill pipe opening of any underground tank for flammable liquid shall, unless approved otherwise, be located outside of any building, and for Sub-class 3.1 or Sub-class 3.2 liquids the fill pipe opening shall, unless approved otherwise, be not less than two metres from any door, window, basement or cellar opening.

Amended by  
G.G. 12/7/74,  
p. 2688;  
G.G. 31/8/79,  
p. 2677 and  
p. 2680.

70. (1) Subject to subregulation (2) of this regulation, both the fill pipe and dip pipe openings to any underground tank that forms part of a pump installation shall be fitted with screw caps or other approved device, be closed liquid tight and locked when not in use, and be set in a metal box flush with the ground and fitted with a metal cover.

Amended by  
G.G. 24/1/75,  
p. 216.

(2) Where the Chief Inspector is satisfied in relation to any premises that it will not constitute a danger he may approve any installation that does not comply with subregulation (1) of this regulation.

71. Where two or more underground tanks are installed in the same licensed premises, the particular tank to which each fill or dip pipe is connected shall be indicated at the surface by means of a metal tag or by any other suitable method.

72. Every underground tank used for liquids of Sub-class 3.1 or Sub-class 3.2 shall have—

- (a) the opening at the bottom of the suction line or foot valve not less than twenty-five millimetres higher than the bottom of the fill and dip pipes or otherwise be so arranged that at all times a liquid seal is maintained;
- (b) all openings in the walls of the dip pipe covered by a screen of metallic gauze of at least twelve meshes to the linear centimetre;
- (c) no openings in the walls of the fill pipe other than a vent to the ullage space; and
- (d) the surface around the fill pipe drained in such a way that no spilled liquid will enter a building.

Amended by  
G.G. 12/7/74,  
p. 2688;  
G.G. 31/8/79,  
p. 2680.

73. (1) Every underground tank used for storage of flammable liquid or oil shall be checked for leakage at intervals of not more than five years until twenty years after its installation, whereupon not more than two years shall be allowed to elapse after it was last checked for leakage.

Substituted  
by  
G.G. 31/8/79,  
p. 2677.

(2) Where a tank is found to be leaking it shall cease to be used for the storage of flammable liquid or oil.

(3) Where an underground tank that has been used for storage of flammable liquid or oil ceases to be so used, or the premises on which it is situated have ceased to be licensed, the owner shall either—

- (a) remove the tank to an approved place and keep it there until it is again to be so used;
- (b) fill the tank with sand, concrete, or some other inert solid material, or with another approved material, and disconnect all pipes from the tank; or
- (c) render the tank free of vapour in an approved manner, fill it with water containing a suitable corrosion inhibitor, and seal any opening in the tank with an effective and permanent seal.

## Pumps for Underground Tanks.

Amended by  
G.G. 31/8/79,  
p. 2677.

74. Every pump used for delivery of any flammable liquid or oil shall be substantially constructed, effective for the purpose and maintained in efficient operating condition, and all electrical wiring and electrical equipment and the installation thereof shall comply with Australian Standard 3000, Part 1—1976, as from time to time amended, or be otherwise approved by a State or Commonwealth authority authorised so to do.

75. Every pump used for the delivery of any flammable liquid or oil and all pipes and connections to the underground tank shall be liquid-tight, and any equipment used for delivery of flammable liquid or oil shall be so designed as to allow control of the flow and to prevent leakage or accidental discharge.

Amended by  
G.G. 12/7/74,  
p. 2688.

76. (1) A pump dispensing head that forms part of a pump installation shall be installed only in an approved position and unless otherwise approved under subregulation (2) of this regulation shall be in the open air or under a fire-resistant roof cover that is open on three sides.

(2) No pump dispensing head that forms part of a pump installation shall be permitted within a building unless the following conditions are complied with:—

- (a) The floor is so drained that any spilled liquid will flow into an intercepting trap.
- (b) The pump is situated within two metres of a carriage entrance to the building, unless otherwise approved by the Chief Inspector.
- (c) There is adequate ventilation around the pump to ensure rapid dispersion of any vapours.
- (d) No means exist whereby liquid or vapour can flow or spread to a lower level beneath the floor on which the pump is situated.
- (e) Where the pump is situated within a building and near to a carriage entrance, there shall be other adequate means of exit from the building available for use in the event of fire at the pump.
- (f) The building is constructed of approved fire-resistant materials.

Amended by  
G.G. 12/7/74,  
p. 2688.

77. A pump dispensing head that forms part of a pump installation shall be installed on a concrete base raised at least seventy-five millimetres above ground level, except in respect of a specified approved pump for which the Chief Inspector has approved another manner of installation and which is located in the open air.

## Filling of Motor Vehicle Fuel Tanks and Receptacles.

Heading  
added by  
G.G. 31/8/79,  
p. 2677.

78. (1) A person shall not smoke or have any open flame within four metres of a vehicle fuel tank or other receptacle while flammable liquid is being supplied from a pump installation to that tank or receptacle.

Amended by  
G.G. 11/5/73,  
p. 1212;  
G.G. 12/7/74,  
p. 2688;

(2) A person shall not dispense any flammable liquid into the fuel tank of a motor vehicle while the engine of that vehicle is running.

G.G. 31/8/79,  
p. 2677-8.

(3) There shall be displayed by the licensee of licensed premises where flammable liquid is dispensed to fuel tanks of motor vehicles a notice, or if so directed by the Chief Inspector more than one notice, to read—

DANGER, NO SMOKING  
STOP ENGINE WHILE REFUELLING

in capital letters not less than thirty-eight millimetres high as to be easily legible and visible to all persons entering the fuel dispensary area.

(4) A person shall not dispense any flammable liquid into a receptacle used as a vehicle fuel tank unless the displaced vapours are vented to a position outside the vehicle.

(5) A person shall not dispense any flammable liquid into a receptacle, the capacity of which does not exceed seventy litres unless the receptacle is used as a vehicle fuel tank or it complies with regulation 126 of these regulations and is standing at ground level at the base of the dispenser.

(6) A person of an age less than fifteen years shall not, within licensed premises, dispense any flammable liquid into a vehicle fuel tank or other receptacle.

#### Hand Fire Extinguishers.

Heading  
added by  
G.G. 31/8/79,  
p. 2688;

79. There shall be provided on all premises where flammable liquid of Sub-class 3.1 is dispensed from a pump installation hand fire-extinguishers of the type, capacity and number prescribed by regulation 136 of these regulations, and such extinguishers shall be located as prescribed by that regulation.

Amended by  
G.G. 24/1/75,  
p. 216;  
G.G. 31/8/79,  
p. 2680.

#### Special Provisions for Self-Service Pumps.

Amended by  
G.G. 12/7/74,  
p. 2688-9;  
G.G. 31/8/79,  
p. 2678.

80. Where any pump for operation by the customer by way of self-service is installed on any licensed premises, the following special provisions shall be observed and complied with:—

- (a) The pump, any mechanism for the operation of the pump by means of a coin or coins, and the whole of the area upon which vehicles or receptacles receiving flammable liquids from the pump may stand, shall be adequately illuminated at all times, except when the pump is locked or otherwise rendered unusable.
- (b) The pump and any mechanism used for the operation of the pump by means of a coin or coins, shall both prominently display in white letters not less than thirty-eight millimetres high upon a red ground the following words—

**DANGER—NO SMOKING  
STOP ENGINE BEFORE OPENING FUEL TANK.**

- (c) The pump shall be situated not less than four metres from any building, any footpath or any roadway.
- (d) The pump shall be so situated, or provision shall be so made, as to prevent any spillage or leakage from flowing onto any public thoroughfare or onto the wall of any building and for this purpose there may be installed a separator or sump having a liquid holding capacity of not less than twenty-three litres.
- (e) The delivery hose of the pump shall be equipped with a nozzle that remains completely shut unless pressed against the opening in the vehicle fuel tank or otherwise shall be of a type approved by the Chief Inspector, and the delivery hose including the nozzle shall be not more than four metres in length and shall not be capable of extending to within less than one metre of any building.
- (f) All electrical wiring and equipment and the installation thereof shall comply with Australian Standard 3000, Part 1—1976, as from time to time amended, or otherwise shall be approved by a State or Commonwealth Authority authorised so to do.
- (g) The pump shall in all other respects conform with the requirements of these regulations and the premises shall be licensed as required by these regulations.

PART V.—CONVEYANCE AND TRANSPORT.  
Tank Wagons, Trailers and Demountable Tanks.

Amended by 81. (1) The design and construction of all vehicles used for conveying flammable liquids or oils shall conform to the requirements of the Road Traffic Act, 1974, as amended from time to time, and the regulations made thereunder and in force for the time being.

G.G. 12/7/74,  
p. 2689;  
G.G. 14/7/78,  
p. 2531.

(2) Tanks for conveyance of flammable liquids shall be constructed and fitted to the approval of the Chief Inspector who may require that drawings and specifications be submitted with the application for approval.

(3) Nothing in this Part applies to any flammable liquid or oil that is conveyed in a fuel tank forming part of a vehicle, and that liquid or oil is for supply to the engine of the vehicle.

(4) A tank wagon that conveys any flammable liquid and on which a tank or tanks is or are permanently mounted shall not exceed in all tanks a total liquid capacity of thirty-seven kilolitres except where specially approved by the Chief Inspector for use in any particular area specified by him.

82. (1) Any tank for the conveyance of any flammable liquid or oil while being conveyed on a vehicle shall be so substantially secured to the vehicle as not to be liable to be broken or to become defective or insecure during the conveyance.

(2) All packages containing any flammable liquid or oil while being conveyed on a road vehicle shall be secured on the vehicle in such manner that the packages will not become damaged or defective during conveyance and not be liable to fall from the vehicle at any time.

83. All due precautions whether prescribed or not shall be taken to prevent any flammable liquid or oil escaping from any vehicle in any way other than in the manner of normal unloading or by normal discharge into tanks or containers.

84. A vehicle shall not have more than one trailer of any kind attached to it while flammable liquid whether in packages or in tanks is being conveyed in either the vehicle or the trailer except as approved by the Chief Inspector in a particular case.

Substituted by 85. Every vehicle conveying flammable liquid or oil shall have displayed on it in the approved manner and colour, approved markings indicating the extinguishing medium and emergency action appropriate in the event of fire or accident.

G.G. 14/7/78,  
p. 2531.

Substituted by 86. Where—  
(a) a tank vehicle is in use, or has recently been used, for the conveyance in bulk of flammable liquid or oil;  
(b) a vehicle is in use for conveying packages which contain or have recently contained flammable liquid, and the aggregate capacity of those packages and any packages containing oil carried therewith exceeds 2.5 kilolitres,  
a person shall not smoke, or light, bring or carry any fire, open light or other source of ignition, within three metres of that vehicle.

G.G. 14/7/78,  
p. 2531.

Substituted by 87. A person shall not leave unattended on any public street or roadway or in any place to which the public has lawful access—  
(a) a tank vehicle in use, or that has recently been used, for the conveyance in bulk of flammable liquid or oil;  
or  
(b) a vehicle in use for conveying packages containing, or that have recently contained, flammable liquid, where the aggregate capacity of those packages and any packages containing oil carried therewith exceeds 2.5 kilolitres,  
except during such time as is necessary for the delivery or loading of liquids or oils conveyed or to be conveyed, or for some other approved reason.

G.G. 14/7/78,  
p. 2531.

88. Except as approved by the Chief Inspector in writing, there shall not be carried on any vehicle while carrying or plying for the carriage of passengers for hire or reward any quantity of Sub-class 3.1 flammable liquid in excess of twenty litres; but this regulation does not apply to flammable liquid carried in fuel tanks or in other approved containers for supply to the engine of the vehicle during the course of the journey.

Amended by  
G.G. 12/7/74,  
p. 2689;  
G.G. 31/8/79,  
p. 2678 and  
p. 2680.

89. A vehicle while carrying flammable liquid, oil, or flammable liquid and oil, in total quantity exceeding 230 litres shall not at the same time carry as freight any explosive or any item described as dangerous goods by the Intergovernmental Maritime Consultative Organisation of the United Nations Organisation (I.M.C.O.) in its system for classifying explosives and dangerous goods, without approval having been given in the particular circumstances by an inspector.

Substituted  
by  
G.G. 14/7/78,  
p. 2531.

90. The driver of a vehicle that is carrying any flammable liquid or oil, shall stop the vehicle before passing over a railway level crossing that is not equipped with twin alternating red lights, a wig-wag signal or gates, booms or other barriers for closing the crossing to road traffic and shall not proceed until he has ascertained that he may do so without danger of conflict with a train.

91. A vehicle that conveys flammable liquids in packages of individual capacity exceeding four litres and in total quantity exceeding one kilolitre shall carry a fire extinguisher on the vehicle as prescribed in regulation 136 of these regulations for the total quantity conveyed.

Amended by  
G.G. 12/7/74,  
p. 2689;  
G.G. 31/8/79,  
p. 2678.

92. (1) A tank trailer shall not be attached to a tank wagon on public roads unless the following conditions are complied with:—

Amended by  
G.G. 12/7/74,  
p. 2689;  
G.G. 14/7/78,  
pp. 2531-2;  
G.G. 31/8/79,  
p. 2678 and  
p. 2680.

- (a) The tank trailer has not less than four wheels, or four dual wheels, and not less than two axles and not more than one trailer is attached to a tank wagon at any one time.
- (b) The tank trailer is attached to the towing vehicle by two independent and efficient fastenings of approved type.
- (c) The tank trailer has effective brakes on all four wheels or dual wheels, as the case may be.
- (d) The tank capacity of a tank trailer that conveys flammable liquid does not exceed thirty-seven kilolitres.
- (e) The combined capacity of a tank wagon and the tank trailer conveying flammable liquids or oils, where either contains flammable liquid, does not exceed thirty-seven kilolitres unless otherwise approved pursuant to subregulation (3) of this regulation.
- (f) A tank wagon and the tank trailer are coupled together under competent supervision, and are not separated for any reason other than because of accident or break-down during the course of the journey without special approval being given by the Chief Inspector for a particular conveyance and for some special reason.
- (g) The tank trailer is not used for general deliveries of Sub-class 3.1 flammable liquids within the metropolitan region as defined in the Town Planning and Development Act, 1928-1979, except such deliveries as the Chief Inspector may approve for direct conveyance from one licensed premises to another licensed premises, which delivery may thereafter continue.
- (h) The tank trailer is fitted with the fire extinguishers of the same number and type prescribed for a tank wagon.

(2) A person shall not attach a trailer that is not a tank trailer containing any flammable liquid in quantity exceeding one kilolitre in packages, to any vehicle, unless—

- (a) the quantity of flammable liquid carried on the trailer does not exceed five kilolitres, unless otherwise approved pursuant to subregulation (3) of this regulation;

- (b) the trailer has not less than four wheels or four dual wheels and is attached to the towing vehicle by two independent and efficient fastenings of approved type;
- (c) the trailer is equipped with such fire extinguisher or extinguishers as a vehicle conveying that quantity of flammable liquid is required under paragraph (c) of subregulation (1) of regulation 136 of these regulations to carry;
- (d) the trailer has effective brakes on all wheels or dual wheels.

(3) A vehicle and attached trailer shall not exceed the limits of capacity specified in subregulations (1) and (2) of this regulation without special approval being given by the Chief Inspector for conveyance on such routes or in such areas as he may specify.

(4) All the regulations in this Part of these regulations which apply to tank wagons apply also to tank trailers to such extent as those regulations may be applicable.

Amended by G.G. 12/7/74, p. 2689; G.G. 13/4/70, p. 1058. 93. (1) Tanks used for conveyance by road of flammable liquids or oils in bulk that do not form an integral part of a vehicle shall comply with the following requirements:—

- (a) The vehicle and tank shall comply with the provisions of these regulations relating to conveyance and transport of flammable liquids in tanks so far as the regulations are applicable to such manner of transport, and the vehicle shall be provided with fire extinguishers as prescribed for tank wagons by regulation 136 of these regulations.
- (b) No such tank shall be carried on a trailer other than a semi-trailer without the approval of the Chief Inspector.
- (c) The tanks shall be constructed in accordance with good engineering design and practice and of approved material.
- (d) The total quantity of flammable liquid or oil shall not exceed 18.2 kilolitres in all tanks on any one vehicle.
- (e) The tanks shall be securely mounted on and attached to the vehicle so as not to be liable to become defective or insecure during conveyance.

(2) Notwithstanding the provisions of paragraph (d) of subregulation (1) of this regulation the Chief Inspector may, from time to time and subject to such conditions and restrictions as he thinks fit, authorise, either specially or generally, the conveyance by road of a tank or tanks containing, separately or in the aggregate, as the case requires, a quantity of flammable liquid or oil in excess of 18.2 kilolitres.

Substituted by G.G. 14/7/78, p. 2532. 94. Where different liquid products that are flammable liquids or oils are conveyed in a tank that is divided into separate compartments—

- Amended by G.G. 31/8/79, p. 2680.
- (a) different Sub-classes of flammable liquids, or flammable liquids and oils shall not be conveyed in adjacent compartments except as approved; and
  - (b) the delivery valve connected to each compartment shall be identified in such manner as to indicate the nature of the contents of that compartment.

Substituted by G.G. 14/7/78, p. 2532. Amended by G.G. 31/8/79, p. 2680. 95. (1) A vehicle engaged in the conveyance at any one time of more than 2.5 kilolitres of flammable liquid, or flammable liquid and oil, shall, subject to subregulation (2) of this regulation, be marked or placarded in a conspicuous position in the following manner—

- (a) where the flammable liquid conveyed is of Sub-class 3.1 with the words "HIGHLY FLAMMABLE", and in any other case with the word "FLAMMABLE", on each side of the vehicle or its load, in lettering not less than 125 mm high, conforming to Series B of Australian Standard 1744, Form of Letters and Numerals for Road Signs, and of a colour conforming to Colour No. 537, Signal Red, specified in Australian Standard K185, Colours for Specific Purposes, on a white background; and



(b) on each of the front and rear of the vehicle or its load with the label, of a size not less than 200 mm square, specified for Class 3 dangerous goods in Australian Standard 1216, Safe Handling of Dangerous Goods, Part 1—Classification and Class Labels for Dangerous Goods.

(2) Paragraph (a) of subregulation (1) of this regulation does not apply to a tank vehicle having on each side an approved trade marking.

96. A vehicle used for the conveyance in bulk of flammable liquids, or flammable liquids and oils, shall comply with the provisions of Australian Standard 2016-1977, Road Tank Vehicles for Flammable Liquids, as from time to time amended, except to the extent that any provision of that standard is inconsistent with these regulations.

Substituted by  
G.G. 14/7/78,  
p. 2532.

97. (1) Power driven pumping units or metering units shall not be fitted to, mounted upon, or used, with any vehicle used for conveyance in bulk of flammable liquids except as provided in Australian Standard 2016-1977, Road Tank Vehicles for Flammable Liquids, as from time to time amended, or, if the pumping unit is of an approved type, with the approval of the Chief Inspector either generally or in the particular case.

Amended by  
G.G. 28/5/69,  
p. 1588;  
G.G. 24/1/75,  
p. 216;  
G.G. 14/7/78,  
p. 2532.

(2) Pumping units shall not be operated—

(a) unless all tank openings are closed, except the vent and the connection to the pump or meter; and

(b) until any spillage has been disposed of.

(3) The provisions of this regulation do not apply to any pumping or metering unit that is an essential part to the working of the engine of the vehicle.

98. Before flammable liquid is delivered to or from a tank vehicle, or any maintenance, repair or modification is carried out upon a tank used for the conveyance of flammable liquid, the person in charge or the owner of the tank shall ensure that the procedures used are in accordance with Australian Standard 2017-1977, Safety Procedures Affecting the Operation, Maintenance and Repair of Road Tank Vehicles for Flammable Liquids, as from time to time amended, except to the extent that any provision of that standard is inconsistent with these regulations.

Substituted by  
G.G. 14/7/78,  
p. 2532.

99. (1) No flammable liquid of Sub-class 3.1 shall be discharged from a tank on a vehicle unless the vehicle is either out in the open air or under a roof cover that has not more than two sides enclosed and is fully open on the remaining sides; but this regulation does not apply in respect of places specially approved and subject to such special precautions being taken as the Chief Inspector may require.

Amended by  
G.G. 31/8/79,  
p. 2678 and  
p. 2680.

(2) Where flammable liquid of Sub-class 3.1 is discharged from a vehicle by means of a pump powered by the engine of the vehicle or any other engine, that engine shall be at least ten metres from the delivery point, and, where possible, upwind of that point.

100. Where a vehicle is used for conveyance of any flammable liquid or oil, the employer shall ensure that the driver and other persons employed on the vehicle have received adequate instruction in all safety measures to be observed and complied with in relation to the driving and operation of the vehicle and its equipment, and that the driver and other persons are advised of the responsibilities imposed upon them under this Part of these regulations.

101. A person shall not take, or permit or cause to be taken, any tank used for conveyance of any flammable liquid or oils in bulk into any repair shop or workshop (other than one situated on premises owned by the owner of the tank) for carrying out any repairs, alterations or modifications whatsoever either to the tank or to the vehicle, unless one of the following precautions is taken:—

- (a) The tank, if it is to remain overnight, is emptied, made free of flammable vapours, and tested with an approved detecting apparatus for flammable vapours, and work shall not be commenced until the tests indicate that it is safe to do so.
- (b) The tank, if it is not required to remain overnight, is either made free of flammable vapours and tested in accordance with paragraph (a) of this regulation, or the tank is emptied and then filled with water to float off any residual flammable liquid, and while still full of water the tank is sealed off at all openings, other than the vents, by screw caps, blank flanges or other approved means.

#### Conveyance of Flammable Liquids and Oils in Pipelines.

102. (1) Pipelines on any wharf or on property under the control of a Harbour or Port Authority shall be installed, maintained and operated in accordance with a Code of Regulations agreed to by the Australian Port Authorities Association and adopted by the Harbour or Port Authority.

(2) Nothing in these regulations shall restrict the construction or operation of a pipeline that is within licensed premises and under the control of the licensee or of any other pipeline that is wholly within any premises.

(3) All pipelines other than those referred to in subregulations (1) and (2) of this regulation shall be subject to the following provisions of this Part of these regulations, except that when any of those provisions are impracticable because of the length of the pipeline, the Chief Inspector may approve other means of construction, operation and maintenance that are in accordance with good standard practice and suitable for the length of the pipeline or the purpose for which it is to be used.

#### Construction and Installation of Pipelines for Flammable Liquids.

103. A person shall not install, relay, renew or effect any structural repairs to any pipeline for flammable liquids outside of licensed premises, unless—

- (a) he has submitted proposals of such installation, relaying, renewal or repairs together with all relevant details to the Chief Inspector;
- (b) the approval of the Chief Inspector has been given in writing to such proposals; and
- (c) approval for the work has also been given by the Local Governing Authority or other authorities controlling the area or areas traversed by the pipeline;

except that in any case of emergency, remedial action may be taken immediately by the owner of the pipeline and subsequently reported to the Chief Inspector within fourteen days thereafter.

104. (1) Where any portion of an existing pipeline is to be relaid or renewed, or any structural repairs are to be effected, such pipeline or any section thereof shall be regarded as a new pipeline and be subject to these regulations.

(2) In this regulation "structural repairs" includes repairs or alterations involving welding.

105. Where the Chief Inspector is of opinion that it is in the interests of public safety so to do, he may by notice in writing require the owner of a pipeline to relay, renew or repair the pipeline in accordance with such requirements as the Chief Inspector may specify in the notice.

106. Pipelines, valves, flanges and fittings shall comply with the relevant requirements of British Standards, British Institute of Petroleum Safety Codes, American Petroleum Institute, or other approved specifications.

107. Joints in pipelines shall be welded wherever practicable, and otherwise shall be made with flanged ends or by other approved means.

108. Pipelines that are above ground and used for conveyance of flammable liquids shall be suitably bonded or earthed throughout their entire length, and the resistance to earth shall not exceed 10 ohms and shall be tested at intervals of not more than twelve months.

109. (1) Wherever practicable, pipelines shall be laid above ground and be supported at a height of not less than 150 millimetres above ground on strong supports which shall be of non-combustible material. Amended by  
G.G. 12/7/74,  
p. 2689.

(2) All pipelines and control valves shall be marked as required by the Chief Inspector and be protected against corrosion or injury.

110. Pipelines laid under railway tracks, roads or streets, or in places where they may be subjected to heavy loading, shall be installed in accordance with such specification or proposal in regard to sleeving or culverting as may be approved, and in accordance also with any additional requirements of the statutory authority having control of the railway tracks, roads or streets.

111. Pipelines laid in ground, the surface of which is subject to loading of vehicular traffic, shall have at least 600 millimetres of approved cover over the top of the pipe, any flanges on the pipe being regarded for the purpose of this regulation as part of the pipe, and suitable access pits with covers shall be provided for valves, and flanged joints shall be readily accessible. Amended by  
G.G. 12/7/74,  
p. 2689.

112. (1) When first installed, pipelines shall be tested with water in sections over the full length of the pipeline and full pressure shall be maintained for the period of each test with a minimum period of 30 minutes.

(2) The testing pressures shall be as specified in the Code or Specification used for construction of the pipeline, and a pipeline shall not be used until such testing shows that it is free from leaks.

113. Upon the installation of any pipeline, provision shall be made to relieve excessive pressure due to temperature variations when the pipeline is left full of liquid.

#### Maintenance and Operation of Pipelines for Flammable Liquids.

114. (1) Every pipeline for flammable liquid shall be pressure-tested with water either at regular intervals or immediately before each operation of pumping flammable liquid through the pipeline, and such pressure tests shall be made at a pressure 25 per centum in excess of the normal operating pressure with the full test pressure being maintained for the period of the test with a minimum period of 30 minutes.

(2) After any test made in accordance with this regulation, any defect thereby disclosed shall be repaired before the pipeline is again used.

115. Pipelines for flammable liquid shall be so maintained as to be free from leakage of liquid or vapour, and valves and other appliances that form part of such pipelines shall on each occasion before and during any pumping operation be inspected to ensure certainty of operation.

Substituted by G.G. 31/8/79, p. 2678. 116. All electrical equipment about a pipeline for flammable liquid shall comply with Australian Standard 3000, Part 1—1976, as from time to time amended, and with the requirements of The State Energy Commission of Western Australia, and shall be inspected at intervals of not more than six months to ensure that it continues to so comply.

Amended by G.G. 12/7/74, p. 2689. 117. All underground pipelines for flammable liquid shall be examined by the owner at intervals not exceeding 460 metres at least once in every five years, and the result of each examination shall be recorded and made available to an inspector if required.

Amended by G.G. 12/7/74, p. 2689. 118. (1) At the commencement of pumping flammable liquids, and after each change of grade of liquid at which water clearance is employed, the velocity in the pipelines shall be restricted to a maximum of 915 millimetres per second for a period of 30 minutes, or sufficient time to clear the pipeline twice, whichever is the longer time, but such requirements shall not apply where change of grade of liquid is made by face to face pumping or short water plug separation.

(2) The slow pumping rate as specified in subregulation (1) of this regulation shall also be observed when filling empty tanks until the fill pipe is covered.

(3) Where pipelines vary in bore the slow pumping rate as specified in subregulation (1) of this regulation shall be applied to that part having the smallest bore.

119. During pumping operations the terminal control valves at each end of a pipeline for flammable liquids shall be closely watched by competent persons who shall close the valves in the event of any untoward occurrence.

120. (1) When not in use or after a conveyance is completed pipelines shall, wherever practicable, be thoroughly freed from flammable liquid and any hoses or delivery appliances shall be disconnected from the ends of the pipeline and the end valve closed.

(2) Pipelines not in use shall, wherever practicable, be kept full of water, except where because of operational requirements a pipeline is kept full of flammable liquid.

#### Pipelines for Oils.

121. (1) Pipelines for conveyance of oils shall be constructed, maintained and operated in accordance with good engineering practice and to approval of the Chief Inspector, and adequate precautions shall be taken to prevent leakage of any oil.

(2) On completion of pumping operations such pipelines shall be cleared of oil as far as practicable, except where because of operational requirements the pipelines are kept full of oil.

(3) Pipelines for conveyance of oils that may also be used for conveyance of flammable liquids shall comply with all these regulations applicable to pipelines for flammable liquids except when otherwise approved in writing by the Chief Inspector and subject to such conditions as he may specify.

#### PART VI.—MARKING AND LABELLING.

122. Nothing in this Part of these regulations applies to any tank or industrial equipment that is exempt under the provisions of subregulation (2) of regulation 3 of these regulations, or to any liquids withdrawn for immediate use, or to any tank that is exempted for practical reasons by the Chief Inspector.

Amended by G.G. 31/8/79, p. 2680. 123. (1) A person shall not store, convey, sell or expose for sale any flammable liquid or oil in a package unless the package is marked with the trade name of the liquid or oil and with such other wording as prescribed in this Part of these regulations for each Sub-class of liquid or oil.

(2) Where a package referred to in subregulation (1) of this regulation is contained within an outer package, that outer package shall also be marked or labelled as prescribed by regulation 125 of these regulations.

(3) A person who sells or supplies to any other person, or who stores in any place any package containing flammable liquid of a Sub-class other than that described on the outside of that package commits a breach of these regulations.

124. (1) All labels, marks or lettering required by these regulations to be marked on any package for any flammable liquid or oil shall be clearly legible and of contrasting colour.

(2) The provisions of this Part do not apply in relation to any package containing flammable liquid that is labelled with a warning label complying with the provisions of any other Act of the State or regulations in force thereunder.

125. (1) Every package containing flammable liquid of Sub-class 3.1 shall be marked with the words "HIGHLY FLAMMABLE".

Amended by  
G.G. 24/1/75,  
p. 216;  
G.G. 14/7/78,  
p. 2532;  
G.G. 31/8/79,  
p. 2678 and  
p. 2680.

(2) Every package containing flammable liquid shall be marked conspicuously with the label specified for Class 3 dangerous goods in Australian Standard 1216, Safe Handling of Dangerous Goods, Part 1—Classification and Class Labels for Dangerous Goods as from time to time amended, of a size not less than—

- (a) where the capacity of the package does not exceed five litres—20 mm square;
- (b) where the capacity of the package exceeds five litres but does not exceed twenty litres—30 mm square; and
- (c) where the capacity of the package exceeds twenty litres—100 mm square.

(3) Tank vehicles for conveyance of flammable liquids or oils shall be marked as prescribed in subregulations (1) and (2) of regulation 95 of these regulations.

(4) The word "INFLAMMABLE" may be used wherever the word "FLAMMABLE" is prescribed in these regulations.

#### PART VII.—PACKING.

126. (1) Packages for flammable liquids and oils shall be of metal and constructed in accordance with the provisions of this Part of these regulations or otherwise shall be of material and construction approved by the Chief Inspector.

(2) Every package shall be so substantially constructed as not to be liable to be broken or to become defective or insecure during or in the course of handling, storage or conveyance, and shall be capable of being so securely closed that no flammable liquid or oil contained therein or any vapour thereof can escape from the package during the normal course of storage handling or conveyance.

127. Any package found to be, or suspected of being, defective or broken during handling, storage or conveyance shall immediately be set aside in a safe place, preferably in the open air, and as soon as reasonably practicable be re-packed, repaired or otherwise disposed of in a safe manner.

128. (1) Packages for flammable liquids being drums of a capacity exceeding twenty litres shall conform as to thickness of metal and manner of construction with Australian Standard 1950-1976, Fixed End and Removable End Steel Pails, as from time to time amended, or Australian Standard 1951-1976, Fixed End and Removable End Steel Drums, as from time to time amended, as is appropriate to the case, and shall be so designed as to meet the recommended performance test requirements of the Intergovernmental Maritime Consultative Organisation of the United Nations Organisation (IMCO) in relation to packages used for the conveyance of dangerous goods.

Amended by  
G.G. 12/7/74,  
p. 2689 and  
2691;  
G.G. 31/8/79,  
p. 2679.

(2) The provisions of this regulation do not restrict the use of drums having a thickness of metal that exceeds the requirements of this regulation.

Amended by G.G. 12/7/74, p. 2689; G.G. 31/8/79, p. 2679. 129. (1) Packages for flammable liquids that are of capacity exceeding four litres and not exceeding twenty litres shall be of metal unless otherwise specially approved in writing by the Chief Inspector, and shall be constructed and capable of being securely closed as prescribed in regulation 126 of these regulations.

(2) Packages for oils may consist of any commercially produced container that conforms with the requirements of regulation 126 of these regulations.

#### PART VIII.—FIRE EXTINGUISHING APPARATUS.

130. There shall be provided on all licensed premises such apparatus, equipment or appliances for prevention or extinguishing of fire as are specified in this Part of these regulations, and where in these regulations any vehicle or place is required to be provided with hand fire-extinguishers, those fire-extinguishers shall, unless these regulations specify otherwise, be of the type and capacity specified in this Part of these regulations.

131. Where by these regulations or under the terms of a licence issued pursuant to these regulations, fire extinguishing equipment is required to be provided or installed, the owner of a vehicle or the occupier of a place in which the fire extinguishing equipment is provided or installed shall maintain the equipment in good working order at all times, have it ready for immediate use and ensure that employees are familiar with the location of the equipment and are instructed in the manner of its operation.

Amended by G.G. 31/8/79, p. 2679. 132. (1) The owner or occupier of any licensed premises shall arrange with the Western Australian Fire Brigades Board, or with a person approved by that Board, for the periodical inspection and testing of all fire extinguishing equipment and fire alarm systems (if any), and in the event of such equipment being found defective by the inspecting officer of the Board or the person approved by that Board, shall on receipt of a report to that effect immediately cause the defects to be rectified.

(2) The owner or occupier of any licensed premises shall maintain in proper order and condition all appliances required by these regulations to be provided for the control or extinction of fire and all hand fire extinguishers, in accordance with Australian Standard 1851, Rules for the Installation and Maintenance of Fire Extinguishers and Fire Hose Reels, as from time to time amended, except to the extent that any provision of that standard is inconsistent with these regulations.

(3) Where under these regulations hand fire extinguishers are required to be carried on any vehicle, such extinguishers are required to be inspected tested and maintained in accordance with the provisions of subregulations (1) and (2) of this regulation.

133. All fire extinguishing equipment after being used or accidentally discharged, shall as soon as possible be recharged or otherwise prepared and made ready for further use.

Amended by G.G. 12/7/74, p. 2689; G.G. 31/8/79, p. 2679. 134. Fire extinguishers that may be required under these regulations shall be of the following types:—

(a) Hand fire extinguisher means an appliance that can be carried or moved by hand to a fire and that is one of the following types:—

Foam: Extinguishers complying with Australian Standard 1844, Foam (Gas Container) Type Portable Fire Extinguishers, as from time to time amended, or Australian Standard 1845, Foam (Stored Pressure) Type Portable Fire Extinguishers, as from time to time amended.

Dry Chemical: Extinguishers complying with Australian Standard 1846, Dry Chemical Type Portable Fire Extinguishers, as from time to time amended.

Carbon Dioxide: Extinguishers complying with Australian Standard 1847, Carbon Dioxide Type Portable Fire Extinguishers, as from time to time amended.

BCF: Extinguishers complying with Australian Standard 1848, Halogenated Hydrocarbon Type Fire Extinguishers, as from time to time amended.

- (b) General Fire Extinguishing Systems means a fixed system designed to protect the whole of an area where flammable liquids are stored.

General Extinguishing Systems may be any of the following types:—

Hydrant Installation.  
Atomised Water Systems.  
Foam Generating Systems.  
Inert Gas Systems.  
Vapourising Liquid Systems.  
Automatic Sprinkler Systems.  
Steam Pressure Systems.

The capacity and discharge rate of any general system shall be adequate for the area and the storage to be protected and shall be approved by the Chief Inspector who may then reduce the requirements of these regulations in respect to the provision of hand fire extinguishers.

135. General fire extinguishing systems designed to operate automatically in the event of fire shall be provided with a manual control device that will operate the system independently of the automatic control and such manual control device shall be located in an approved position that is readily accessible at all times.

135A. Fire extinguishers shall be selected so that—

- (a) where the principal fire hazard is created by alcohol or any other polar liquid, any extinguisher of the foam type shall contain an alcohol-compatible foam; and  
(b) where extinguishers of the dry chemical type and the foam type are provided in circumstances where they may be required for use in the same proximity, they shall be compatible for such use.

Added by  
G.G. 31/8/79,  
p. 2679.

136. (1) The type, number and capacity of hand fire extinguishers which shall be provided on vehicles conveying flammable liquids or oils and on all premises where flammable liquids or oils are stored under licence shall be in accordance with the following:—

- (a) Drum Depots: Every depot classified as of Type A or B shall be provided with—  
(i) at least two hand fire extinguishers each of at least nine kilograms capacity and of the dry chemical type, or at least one such extinguisher and one extinguisher of the foam type and at least nine litres capacity; and  
(ii) buckets, bins, or other containers filled with a total of at least forty-five litres of clean, dry sand, and equipped with scoops or shovels for distributing the sand,

Amended by  
G.G. 30/7/70,  
p. 2253;  
G.G. 12/7/74,  
p. 2689-90;  
G.G. 24/1/75,  
p. 216;  
G.G. 14/7/78,  
p. 2533;  
G.G. 31/8/79,  
p. 2679-80.

in respect of each 240 square metres, or part thereof, of floor area in the depot. Every depot classified as of Type C shall be provided with at least one hand fire extinguisher being of either the carbon dioxide type and at least 3.4 kilograms capacity, or the dry chemical type and at least 4.5 kilograms capacity.

All extinguishers required to be provided at drum depots shall be located in easily accessible positions as approved.

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- (b) Pump Installations: For each six dispensing heads, or part thereof, on the same dispensing area there shall be provided two hand fire extinguishers, of which—
- (i) one shall be of either the BCF type and at least 2.25 kilograms capacity, or the carbon dioxide type and at least 3.4 kilograms capacity; and
  - (ii) one shall be of either the foam type and at least nine litres capacity, or the dry chemical type and at least nine kilograms capacity,
- and each extinguisher shall be located in an easily accessible position as approved.
- (c) Vehicles Conveying Packages: A vehicle conveying flammable liquid, or flammable liquid and oil, in packages shall carry—
- (i) where the total quantity of flammable liquid, or flammable liquid and oil, conveyed exceeds one kilolitre—at least one fire extinguisher of at least 4.5 kilograms capacity and of the dry chemical or BCF type;
  - (ii) where the total quantity of flammable liquid, or flammable liquid and oil, conveyed exceeds 2.5 kilolitres—at least two fire extinguishers each of at least 4.5 kilograms capacity and of the dry chemical or BCF type, or at least one such extinguisher and one extinguisher of the foam (gas container or stored pressure) type of at least 9 litres capacity;
  - (iii) where the total quantity of flammable liquid, or flammable liquid and oil, conveyed exceeds ten kilolitres—at least two fire extinguishers each of at least 9 kilograms capacity and of the dry chemical or BCF type or at least one such extinguisher and one extinguisher of the foam (gas container or stored pressure) type and at least 9 litres capacity.
- (d) Tank Vehicles: A tank vehicle conveying in bulk flammable liquid, or flammable liquid and oil, shall carry such fire extinguishers as it would be required to carry pursuant to paragraph (c) of this subregulation if it were a vehicle conveying flammable liquid, or flammable liquid and oil, in packages except that where the quantity of flammable liquid, or flammable liquid and oil, so conveyed does not exceed 2.5 kilolitres, it shall for the purposes of this paragraph, be deemed to exceed 2.5 kilolitres.
- (e) Tank Depots: Tank depots for storage under license of flammable liquids or oils in above-ground tanks with a total capacity in all tanks in any one depot not exceeding twenty-three kilolitres shall be provided with at least one hand fire extinguisher of the dry chemical type and at least nine kilograms capacity, and with buckets, bins, or other containers filled with a total of at least forty-five litres of clean, dry sand, and equipped with scoops or shovels for distributing the sand, and each such extinguisher, bucket, bin or container shall be located in an easily accessible position as approved.
- (f) Dispensing areas: On premises where flammable liquid is dispensed from a bulk storage by any means there shall be provided at least one hand fire extinguisher, the capacity, type and location of which shall be as approved.
- (2) Where one or more hand fire extinguishers is or are carried on any vehicle as required under subregulation (1) of this regulation, the extinguisher or extinguishers shall be mounted with suitable fittings and located in easily accessible positions on the vehicle.
- (3) Notwithstanding the provisions of subregulation (1) of this regulation, where a fire extinguisher of a type other than those specified in that subregulation is approved for use in a vehicle or a depot, as the case may be, that extinguisher may be used as an alternative to those so specified.



Fire-fighting Equipment for Tank Depots and Major  
Oil Installations.

137. (1) On all licensed premises where flammable liquids or oils are stored in above-ground tanks in quantity exceeding twenty-three kilolitres in any one depot, the fire precautions and the provision of fire-fighting equipment and appliances shall be approved by the Chief Inspector.

Amended by  
G.G. 12/7/74,  
p. 2690.

(2) Before granting his approval the Chief Inspector shall require that the whole equipment as well as the operation and maintenance thereof shall be of a standard approved by the Western Australian Fire Brigade Board.

138. Specifications of all fire-fighting equipment and appliances, other than hand fire extinguishers, shall be submitted for approval of the Chief Inspector with the application for a license of the premises and before the installation of the equipment.

139. The provision of hand fire extinguishers throughout the licensed premises shall be in accordance with these regulations and as approved by the Chief Inspector.

140. (1) On licensed premises where flammable liquids or flammable liquids and oils are stored in total quantity exceeding ninety-one kilolitres in all above-ground tanks there shall be—

Amended by  
G.G. 12/7/74  
p. 2690;  
G.G. 24/1/75  
p. 216.

- (a) a supply of water from service mains supply;
- (b) hydrants hoses and fittings as approved for fire-fighting purposes; and
- (c) an approved quantity of foam compound kept in the premises together with foam-producing equipment.

(2) The Chief Inspector may grant exemption from all or any of the requirements of subregulation (1) of this regulation or modify these requirements having regard to—

- (a) the distance between the premises and the nearest water main;
- (b) the distance which can be permanently maintained between tanks or between tank depots and protected works;
- (c) the total quantity of flammable liquids stored on the premises in above-ground tanks.

141. (1) On licensed premises where flammable liquids or flammable liquids and oils are stored in total quantity exceeding 5 100 kilolitres there shall be—

Amended by  
G.G. 12/7/74,  
p. 2690;  
G.G. 24/1/75,  
p. 216.

- (a) an adequate supply of fresh or salt water provided in sufficient quantity and at sufficient pressure for the purpose of fighting fire in any part of the premises;
- (b) main water pipes located about the premises as a ring main or otherwise as approved;
- (c) water pipelines provided to each tank and fitted with suitable control valves;
- (d) a sufficient number of water hydrants located in approved positions; and
- (e) a supply of foam compound kept on the premises together with equipment for generating and supplying foam for fire fighting.

(2) Hydrants required to be provided under subregulation (1) of this regulation shall be capable of projecting water through 30.4 metres of sixty-four millimetres hose to a horizontal distance of eighteen metres when a nozzle of twenty-two millimetres diameter is used.

(3) All water pipelines required under subregulation (1) of this regulation for fire-fighting purposes shall be adequately flushed with water at least once every six months, and provision shall be made for that purpose.

Amended by G.G. 12/7/74, p. 2690. 142. Where a foam installation is installed under the provisions of regulation 141 of these regulations, the following requirements shall be complied with—

- (a) there shall be kept sufficient foam compound to provide 45.5 kilolitres of foam where one hydrant is installed by these regulations and ninety-one kilolitres of foam where two or more hydrants are so required, in addition to the foam required for any fixed discharge outlets on tanks.
- (b) strainers capable of removing from the water all solids likely to obstruct openings in foam apparatus shall be provided.
- (c) foam equipment shall be capable of projecting a stream of foam to a horizontal distance of at least eighteen metres as measured from the point at which foam falls to the ground when tested in the open.
- (d) any central foam-mixing house shall be a detached non-combustible structure of approved type and located in an approved position.
- (e) the system shall be tested with foam when installed and thereafter at least once in each consecutive twelve months and the records of all tests shall be kept and made available to an inspector or an officer of the Western Australian Fire Brigade when required.
- (f) after any test or other use with foam the system shall be flushed out with clean water for not less than 15 minutes.

Amended by G.G. 12/7/74, p. 2690. 143. Where an above-ground tank depot for the storage of flammable liquids or oils in excess of 5 100 kilolitres is so located that in the opinion of the Chief Inspector it is, or is likely to be, a danger to surrounding works or property, there shall be installed at that depot fixed foam discharge outlets on all flammable liquid tanks of more than 6.1 metres diameter, but otherwise such protection may or may not be installed on tanks.

Amended by G.G. 12/7/74, p. 2690. 144. Where fixed foam protection on tanks is required under the provisions of regulation 143 of these regulations, such protection shall comply with the following additional requirements:—

- (a) Floating roof tanks shall have a foam system, capable of covering the circumferential seal with foam in at least 2 minutes.
- (b) Fixed roof tanks shall have a foam system to provide an average cover of at least thirty millimetres of foam per minute, measured on the maximum water surface in the tank, and tanks up to 12.2 metres in diameter shall have at least one foam discharge inlet, tanks over 12.2 metres and up to thirty-six metres in diameter shall have two such inlets, and tanks exceeding thirty-six metres in diameter shall have at least four such inlets.
- (c) Foam inlets on fixed roof tanks shall either—
  - (i) enter the tank through the second strake from the roof with the interior pipe and discharge outlet not connected to the top strake or roof; or
  - (ii) enter the tank through the top strake provided that the riser is fitted with an approved flexible joint and the interior pipe and discharge outlet are not connected to the tank roof.
- (d) Sufficient foam compound shall be kept and the requisite amount of water shall be available to provide—
  - (i) a covering of 150 millimetres of foam on the liquid surface of the two largest tanks of either fixed roof or floating roof type; and
  - (ii) a covering of seventy-five millimetres of foam on the liquid surface of the remaining tanks.

## PART IX.—LICENSING AND CONTROL.

145. Except as provided for by exemptions under subregulation (2) of regulation 3, and in Part III of these regulations all premises where flammable liquids or oils are stored either in bulk or otherwise and whether in above-ground or under-ground tanks shall be licensed as provided in these regulations.

146. (1) Every application for licence shall be made in writing to the Chief Inspector and in such form as the Minister may from time to time direct.

Amended by  
G.G. 12/7/74,  
p. 2690;  
G.G. 31/8/79,  
p. 2680.

(2) With every application for licence the applicant shall supply the following information relative to the premises and the storage of flammable liquids and oils thereon:—

- (a) The location of the premises and a plan drawn to scale showing the position of the premises relative to any roads, railway, public buildings and protected works within forty-five metres of the boundaries of the premises.
- (b) A ground plan of the premises drawn to scale showing the relative positions on the premises of all drum depots, tank depots, protected works and other buildings.
- (c) Particulars of the maximum quantities of flammable liquids and oils to be stored in each separate depot stating whether they are of Sub-class 3.1, Sub-class 3.2 or Sub-class 3.3 and giving the names or general description of all liquids to be stored.
- (d) Details of the manner of storage whether in drum depots, above-ground or under-ground tanks.
- (e) The general nature of the business carried on at the premises.
- (f) A reference to any specifications or code intended to be used for construction of tanks on the premises.
- (g) A description of any fixed fire extinguishing system or water supply to be provided on the premises for fire fighting purposes.

147. Before granting a licence, the Chief Inspector may request any further information relating to the licensing of the premises which may to him appear necessary, and upon his being satisfied the Chief Inspector may—

- (a) grant the licence in accordance with the application;
- (b) grant the licence subject to such modification of the proposals as may be consistent with the provisions of these regulations or if the storage was already established prior to the commencement of these regulations, the Chief Inspector may grant the licence subject to compliance with these regulations within a specified time from the date of issue of the licence which specified time may be extended at his discretion; or
- (c) refuse to grant the licence if he considers that the proposed storage will not be in the interest of public safety.

148. The Chief Inspector shall not grant a licence for any proposed storage of flammable liquid or oil unless he is satisfied that—

- (a) the storage location and also the proposed structures, buildings or tanks in which flammable liquids or oils are intended to be stored, are approved by the Council of the Municipality;
- (b) the proposed storage depots will comply with the provisions of these regulations, except that a storage established prior to the commencement of these regulations may be licensed as provided for in regulation 147 of these regulations; and
- (c) the applicant has paid the licence fee prescribed for the total maximum quantity of all flammable liquids and oils to be stored on the premises.

149. (1) A pump installation shall be regarded for licensing purposes as a tank depot and two or more pump installations may be installed on the same licensed premises, but no pump installation shall be installed or operated in any Municipality unless it is on a permanent site approved by the Council of that Municipality.

(2) This regulation does not apply to a pump installation forming part of a storage that is exempt under Part III of these regulations.

150. (1) Before any pump installation is installed or operated, an application shall be made to the Chief Inspector for licence as a tank depot, but the licence shall not be granted unless the storage of all flammable liquids and oils on the premises is in compliance with these regulations and the licence fee has been paid.

(2) A mobile pump installation for selling any flammable liquid and supplying the same directly into the fuel tanks of motor vehicles shall not be licensed.

151. No flammable liquid shall be supplied to the general public by direct delivery into the tanks of motor vehicles or boats from a pump installation that is not approved and licensed by the Chief Inspector as a tank depot.

Substituted by G.G. 28/5/69, p. 1588. Amended by G.G. 31/8/79, p. 2680. 152. (1) Every licence shall, unless earlier cancelled or revoked, remain in force for a period of twelve months from the date on which it was issued or last renewed.

(2) [*Revoked by G.G. 31-8-79, p. 2680.*]

(3) [*Revoked by G.G. 31-8-79, p. 2680.*]

(4) A licence issued in respect of any premises wherein, subject to paragraph (b) of regulation 147 of these regulations, the storage of flammable liquid or oil complies with the requirements of these regulations may, on its expiration, be renewed for a period of twelve months on the payment of the prescribed fee.

153. Where any change occurs in the occupancy of any licensed premises the new occupier shall within seven days thereof give to the Chief Inspector notice in writing of the change and apply for transfer of the licence.

Amended by G.G. 28/5/69, p. 1588. 154. (1) Any person to whom a licence has been issued under these regulations shall notify the Chief Inspector in writing of any change or alteration made to any depot on the licensed premises or of any other change on the licensed premises that would alter the conditions for which the licence was granted, within seven days of the occurrence of such change or alteration.

(2) Where a change or alteration is made to the conditions upon which any licence was granted, the Chief Inspector may alter or amend the licence if the conditions as so changed or altered continue to comply with these regulations.

155. (1) A licence may be cancelled or revoked by the Chief Inspector if—

- (a) the licensee fails to comply with the terms and conditions of the licence;
- (b) the licensee is convicted of a breach of the Act or of these regulations;
- (c) there is a change of circumstances on the premises to an extent that the provisions of the Act and these regulations are no longer complied with; or
- (d) the licensee fails to renew the licence and fails to pay the prescribed fee within one month of the due date.

(2) The Chief Inspector shall give notice in writing of the expiration of every licence but shall not cancel or revoke any licence until the expiration of a period of fourteen days after the issue of a notice in writing of his intention to cancel or revoke the licence and stating his reasons for so doing.

## Licence and Testing Fees.

156. (1) Annual fees payable for each licence and for renewal of same shall be as follows:—

Amended by  
G.G. 22/12/72,  
p. 4801;  
G.G. 12/7/74,  
p. 2690.

For each licensed premises in which the approved liquid storage—

	\$
Does not exceed 2.3 kilolitres	3
Exceeds 2.3 but does not exceed 23 kilolitres	6
Exceeds 23 but does not exceed 46 kilolitres	15
Exceeds 46 but does not exceed 230 kilolitres	40
Exceeds 230 but does not exceed 2 300 kilolitres	85
Exceeds 2 300 but does not exceed 4 600 kilolitres	250
Exceeds 4 600 but does not exceed 9 200 kilolitres	400
Exceeds 9 200 but does not exceed 13 800 kilolitres	500
Exceeds 13 800 but does not exceed 18 400 kilolitres	600
Exceeds 18 400 but does not exceed 23 000 kilolitres	700
Exceeds 23 000 kilolitres	800

(2) Where the storage is increased during the period of an existing licence and the fee payable for such increased storage exceeds the fee already paid, the higher fee shall be paid at the next renewal subject to the provisions of regulation 154 of these regulations.

(3) For any transfer of a licence there shall be paid a fee of two dollars.

(4) For the determination of flash point of any liquid for which a certificate is issued there shall be paid a fee of two dollars.

157. (1) Where by these regulations an act is required to be done, or forbidden to be done in relation to licensed premises, the licensee of those premises has, unless the contrary intention appears, the duty of causing to be done the act so required to be done, or of preventing from being done the act so forbidden to be done, as the case may be.

Amended by  
G.G. 30/7/70,  
p. 2253.

(2) Subject to subregulation (1) of this regulation, and unless otherwise expressly provided, where by these regulations anything is required to be done, or forbidden to be done, every person keeping, conveying or handling flammable liquids shall have the duty of causing to be done the act so required to be done, or of preventing from being done the act so forbidden to be done, as the case may be.

## Penalty.

158.<sup>1</sup> Any person who commits a breach of any of these regulations is liable upon conviction to a penalty not exceeding two hundred dollars, and if the breach is a continuing one, to a further penalty not exceeding twenty dollars for each day during which the breach is continued.

<sup>1</sup>. A new regulation 158 was published in G.G. 14/3/80, p. 897 but is not included in this reprint. The new regulation increases the maximum fine to \$2 000 and the daily penalty to \$200.

