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EXPLOSIVES AND DANGEROUS GOODS ACT, 1961.

Department, of Mines,
Perth, 3rd May, 1967.

HIS Excellency the Governor in Executive Council, acting pursuant to the provisions of the Explosives and Dangerous Goods Act, 1961, has been pleased to make the regulations set forth in the schedule hereunder.

I. R.. BERRY,
Under Secretary for Mines.

SCHEDULE.

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, 1967.

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 Classes 1, 2 and 3 of the Third Schedule to the Act or may from time to time so declare and classify.

(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 sub-regulation, the decision of the Chief Inspector shall prevail.

Arrangement.

4. These regulations are divided into Parts as follows:—
- PART I.—PRELIMINARY—Regulations 1 to 5.
 PART II.—TESTING—Regulations 6 to 10.
 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 157.

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 6 ins. 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 6 ins. in depth unless otherwise approved;
 “drum depot” means a depot for the storage of flammable liquids or oil in packages;
 “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 Classes 1 and 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 license has been issued in accordance with the provisions of these regulations;
 “oil” means any flammable oil that pursuant to section 42 of the Act has been declared to be dangerous goods and classified in Class 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 90 imperial gallons.
 “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 flammable liquids that are petroleum products from which the liquid is dispensed directly to the fuel tanks of internal combustion engines;

"screen wall" means any wall or other barrier of such material and so constructed and placed as to prevent the spread of fire from any one place to any other place, and for this purpose a screen wall shall have a fire rating not less than that of a wall constructed from $4\frac{1}{2}$ in. of brickwork.

"tank" means any container capable of holding more than 90 imperial gallons 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 as to form an integral part of 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 as to form an integral part of 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.

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 as prescribed in the Institute of Petroleum Standards for Petroleum and its Products Part I—Methods for Analysis and Testing in the 19th Edition, March, 1960, published by the Institute of Petroleum, London, viz. I.P. 170/59 or I.P. 34/58. Correction shall be made for barometric pressure.

7. The Abel apparatus shall be used for determining the flash point of all substances having flash points of 120° F or less than 120° F, and for substances having flash points above 120° F the Pensky Martens apparatus shall be used.

8. Standard models of both Abel and Pensky Martens apparatus 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. By determination of flash point in the manner prescribed by these regulations all flammable liquids and oils shall be classified as follows—

(a) Flammable Liquids—

Class 1: Flash point less than 73° F.

Class 2: Flash point less than 150° F but not less than 73° F;

(b) Oils—

Class 3: Flash point less than 300° F but not less than 150° F.

PART III.—UNLICENSED PREMISES

Where Licence to Store is not Required.

11. Flammable liquids and oils may be stored without licence in the quantities and under the storage conditions set out in this Part of these regulations.

12. (1) Flammable liquids of Class 1 may be stored in quantities not exceeding in total 50 gallons, whether for private use or for sale, if not more than 4 gallons are stored in a dwelling house or in an outhouse so attached to a dwelling house as to form part of the building.

(2) Flammable liquids of Class 2 may be stored in quantities not exceeding in total 250 gallons, whether for private use or for sale, if not more than 20 gallons are stored in a dwelling house or in an outhouse so attached to a dwelling house as to form part of the building.

13. Flammable liquids or oils may be stored in total quantity not exceeding 1,000 gallons of each 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 10 acres 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 50 feet distant from any dwelling house.
- (b) The storage is not less than 50 feet 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 20 feet.

14. (1) Oils may be stored in any quantity, whether in bulk or otherwise, if—

- (a) any quantity in excess of 250 gallons 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, or by such lesser distance as may be approved by an inspector; or
- (b) the storage is attached to or forms part of an oil fuel installation that conforms with the provisions of S.A.A. Code No. C.B. 5-1957 for Oil Fuel Installations, and all provisions of that Code are continued to be complied with after the system is installed.

(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:—

- (a) The liquid or oil is contained in packages the individual liquid capacity of which does not exceed 5 gallons.
- (b) Not more than ten per centum of the total quantity of the liquids and oils so stored is of Class 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:—

- (a) The storage is not less than 50 feet from a public road and not less than 100 feet 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 things fit.

17. Flammable liquids of Class 1 and flammable liquids of Class 2 may be stored in respective quantities not exceeding 90 gallons or 150 gallons 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.

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 oils 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.

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 I 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.

23. All electric wiring and equipment installed in or brought into any depot shall conform to the requirements for installation in hazardous locations in the Rules numbered 630 to 680 inclusive contained in publication, Australian Standard No. CCI, Part 1 of 1961, of the Standards Association of Australia and entitled S.A.A. Wiring Rules.

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 50 feet, 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.

26. Where on licensed premises there are held stocks of drums having an individual capacity exceeding 5 gallons that contain vapours or residues of flammable liquid of Class 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 10 feet of any such drum and the storage shall not be within 20 feet of any dwelling house.

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 10 feet unless a screen wall intervenes.

28. (1) No explosive 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.

(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.

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.

- (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 bunded 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 five feet 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 12 inches 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 3 inches above floor level and fitted with fire-proof sealing where it passes through the roof or wall of the depot. Such ventilating shafts shall be carried to a height above the highest part of the building or of any adjoining building that is within 20 feet 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: Class 1—500 gallons.

Class 2—1,000 gallons.

Oils: Class 3—2,000 gallons.

Provided however that if Class 1 liquids are stored with those of Class 2 or with oils, the whole shall be regarded as if it were a storage of Class 1 liquids.

General Rules for Drum Depots.

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

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

- (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 1 inch 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:—

- (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.
- (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 10 feet 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 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.

TABLE 1.
Separation Distances from Protected Works.
Storage of Class 1 or of Class 1 with any of Class 2 or Class 3 in the
Same Depot.

Distance not less than—	No Screen Wall. In quantity exceeding 50 gallons but not exceeding—	Separated from Protected Works by a screen wall. In quantity exceeding 50 gallons but not exceeding—
Feet	Gallons	Gallons
10	250	1,000
11	300	1,200
12	350	1,400
13	400	1,600
14	450	1,800
15	500	2,000
16	900	3,600
17	1,300	5,200
18	1,700	6,800
19	2,100	8,400
20	2,500	10,000
21	2,750	11,000
22	3,000	12,000
23	3,250	13,000
24	3,500	14,000
25	3,750	15,000
26	4,000	16,000
30	5,000	20,000
40	10,000	40,000
50	20,000	80,000
75	40,000	160,000
100	80,000	320,000 and over
115	120,000	
130	240,000	
150	400,000 and over	

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

TABLE 2.
Separation Distances from Protected Works.
Storage of Class 2 or of Class 2 and Class 3 in the Same Depot.

Distance not less than—	No Screen Wall. Quantity exceeding 250 gallons but not exceeding—	Screen Wall intervening. Quantity exceeding 250 gallons but not exceeding—
Feet	Gallons	Gallons
10	1,000	2,000
15	2,000	4,000
16	3,600	7,200
17	5,200	10,000
20	10,000	20,000
30	20,000	40,000
40	40,000	80,000
50	80,000	160,000
75	160,000	320,000 and over
100	320,000 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, except as provided in regulation 39 of these regulations, 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.

39. (1) Every tank for oil that is attached to or forms part of an installation for the storage and application of fuel oil shall be installed in conformity with the provisions of the SAA Code for Fuel Oil Installations, A.S. No. CB. 5-1957, and the whole of any such installation, including the storage of the fuel oil, shall also conform with the provisions of that Code.

(2) Nothing in these regulations shall apply to such an installation provided that all provisions of the Code continue to be complied with in relation thereto and such installations may at any time be inspected by an inspector for the purpose of ascertaining whether those provisions are being complied with.

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.

(2) All such tanks shall be electrically earthed and no combustible material shall be permitted to remain under or within 10 feet of a tank.

42. (1) Above-ground tanks shall be fitted with adequate vents to permit pressure or vacuum release when filling or discharging operations are in progress, or for any 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 30 meshes to the linear inch. 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 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 following 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 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.
- (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 distance 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.

44. (1) Tanks for storage of flammable liquids within the same tank depot or in separate tank depots on the same licensed premises 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 prescribed distances cannot be observed, or where such reduced distances 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 6 feet as measured from the ground to the lowest part of the tank.

TABLE 3.

Premises for which the Total Licensed Storage of Flammable Liquids and Oils does not Exceed 600,000 gallons.

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	6 feet	6 feet
Ground Level		20 feet	As provided in Regulation 49
Elevated		20 feet	As provided in Tables 1 and 2, but not less than 20 ft. for any tank

TABLE 4.

Premises for which the Total Licensed Storage of Flammable Liquids and Oils exceeds 600,000 gallons 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 50 feet whichever is the less	Dia. of tank or 50 feet whichever is the less	50 feet Provided that the Chief Inspector may approve a reduced distance which is not less than 30 ft.

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 consists 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 oils are stored in excess of a total of 600,000 gallons, 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.

48. If an above-ground tank depot is intended only for the storage of Class 2 flammable liquids or of both Class 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.

49. (1) In an above-ground tank depot where the total storage does not exceed 600,000 gallons, the spacing between tanks may be governed solely by constructional and operational conditions.

(2) The group of tanks in such a 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 20,000 gallons the distance may be 50 feet 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.

50. Where the aggregate capacity of the tanks storing flammable liquids or oils inside a bund exceeds 2,000,000 gallons, intermediate fire walls at least equal to half the height of the main bund walls or 2 feet in height, whichever height is the less, shall be provided to divide the tankage into groups not exceeding that quantity.

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 9,000,000 gallons.

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 50 feet 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.

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 50 feet 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.

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 2 feet below the surface of the ground or otherwise covered by at least 2 feet 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.

(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 1 foot, and from any property line that may be built upon, not less than 6 feet, 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 one foot.

(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.

(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 3 feet of earth cover, or alternatively not less than 2 feet of cover if the cover includes 5 inches 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 1 foot 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.

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 2 feet 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.

66. Before installation, every underground tank shall be tested for leakage with air at a pressure not less than 5 lbs per square inch for a period of not less than 30 minutes and where any tank is suspected of leakage it shall be re-tested.

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.

68. (1) Every underground tank shall be fitted with a vent pipe of not less than 1 inch internal diameter so located that the discharge point is outside of buildings, higher than the fill pipe opening and not less than 12 feet above the level of the ground covering the tank, and the discharge end shall be at least 6 feet from any fire escape and not nearer than 6 feet 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 30 meshes to the linear inch 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 one foot 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 1 inch.

69. The fill pipe opening of any underground tank for flammable liquid shall, unless approved otherwise, be located outside of any building, and for Class 1 or Class 2 liquids the fill pipe opening shall be not less than 5 feet from any door, window, basement or cellar opening.

70. 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.

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 Class 1 or Class 2 shall have—

- (a) the opening at the bottom of the suction line or foot valve not less than 1 inch 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 30 meshes to the linear inch;
- (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.

73. Where an underground tank for any flammable liquid or oil ceases to be used, or where any such tank is situated on premises that have ceased to be licensed, the owner shall either—

- (a) remove the tank; or
- (b) fill the tank with sand or water and securely close all openings vapour tight.

Pumps for Underground Tanks.

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 the rules contained in publication Australian Standard No. CC1, Part 1, 1961 of the Standards Association of Australia and entitled S.A.A. Wiring Rules, 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.

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 5 feet 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.

77. A pump dispensing head that forms part of a pump installation shall be installed on a concrete base raised at least 3 inches 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.

78. (1) A person shall not smoke or have any open flame within 12 feet of a vehicle fuel tank or other receptacle while flammable liquid is being supplied from a pump installation to that tank or receptacle.

(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.

79. There shall be provided on all premises where flammable liquid of Class 1 is sold to the public 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.

Special Provisions for Self-Service Pumps.

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 one and a half inches 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 15 feet 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 5 gallons.
- (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 12 feet in length.
- (f) All electrical wiring and equipment and the installation thereof shall comply with the rules contained in the publication Australian Standard No. CC1. Part 1 of 1961, of the Standards Association of Australia and entitled S.A.A. Wiring Rules, 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.

81. (1) The design and construction of all vehicles used for conveying flammable liquids or oils shall conform to the requirements of the Traffic Act, 1919, as amended from time to time, and the regulations made thereunder and in force for the time being.

(2) Tanks for conveyance of flammable liquids in bulk, that form part of a tank vehicle, 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 8,000 gallons, 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 or 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.

85. (1) Every tank vehicle while engaged in the conveyance of any flammable liquid or oil shall have displayed on it a colour marking to indicate the extinguishing medium to be applied in the event of fire, which marking shall be of the appropriate colour specified in subregulation (2) of this regulation and consist of a metal plate 12 inches square in size displayed on the front of a tank wagon or on the rear of a tank trailer.

(2) Where the extinguishing medium to be applied in the event of fire is water, the marking shall be a red colour, and where the extinguishing medium is foam, water vapour, inert gas or dry powder, the marking shall be a blue colour.

(3) If the flammable liquid or oil conveyed by the tank vehicle is capable of producing toxic gases or vapours in a fire, there shall also be similarly displayed on the tank vehicle a plate having a black cross on a red background.

(4) Where a tank vehicle is used only for conveyance of any flammable liquid or oil in respect of which the extinguishing medium remains the same, the appropriate colour marking specified in this regulation may be permanently painted on that tank vehicle.

86. A person shall not smoke or use any matches or other open flame on or about any tank vehicle or any other vehicle while that vehicle is conveying any flammable liquid or oil in bulk.

87. A tank vehicle or any vehicle which conveys flammable liquid or oil in bulk shall not be left unattended on any public street or roadway or in any place to which the public has lawful access, except during such time as is necessary for the loading or delivery of the liquids or oils conveyed or for some other approved reason.

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 Class 1 flammable liquid in excess of 4 gallons; 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.

89. A vehicle while carrying flammable liquid in total quantity exceeding 50 gallons shall not at the same time carry as freight any explosive or any flammable gases compressed in cylinders, without approval being given in special circumstances by an inspector.

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 one gallon and in total quantity exceeding 200 gallons, shall carry a fire extinguisher on the vehicle as prescribed in regulation 136 of these regulations for the total quantity conveyed.

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

- (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 of Class 1 does not exceed 2,000 gallons.
 - (e) The combined capacity of a tank wagon and the tank trailer conveying flammable liquids or oils where either contains liquid of Class 1, does not exceed 6,000 gallons, 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 Class 1 flammable liquids within the Perth Metropolitan Area, 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 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 200 gallons in packages, to any vehicle, unless—
- (a) the quantity of flammable liquid carried on the trailer does not exceed 1,000 gallons, 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 a fire extinguisher of the dry powder type having a capacity not less than 10 lbs. or other approved fire extinguishers;
 - (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 that apply to tank wagons apply also to tank trailers to such extent as those regulations may be applicable.

93. 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 tanks 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 4,000 gallons 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.

94. Where on a tank vehicle different liquid products are conveyed in separate compartments of the same tank, the delivery valves connected to those compartments shall be identified in such manner as to indicate the nature of the contents of each compartment.

95. (1) A tank vehicle engaged in the conveyance of any flammable liquid of Class 1 shall be marked on each side with the words "HIGHLY FLAMMABLE" in well-defined and conspicuous letters not less than 4 inches high.

(2) A tank vehicle engaged in the conveyance of any flammable liquid of Class 2 shall be marked on each side with the word "FLAMMABLE" in well-defined and conspicuous letters not less than 4 inches high.

(3) A tank vehicle used exclusively for conveyance of flammable liquids or oils of any Class or of different Classes on the same vehicle may be identified by conspicuous colouring to the satisfaction of the Chief Inspector, which colouring may be in the form of such trade marking or names as are commonly associated with flammable liquid goods, and where such colouring is used on a tank vehicle it shall not be necessary to comply with the provisions of subregulations (1) and (2) of this regulation.

96. Every tank wagon used for conveyance in bulk of flammable liquid shall, unless otherwise approved, comply with the following conditions:—

- (a) Discharge from each tank shall be controlled by an internal shut-off valve in addition to a valve and cap at each discharge point.
- (b) Discharge points, whether at the rear or side of the vehicle, shall be so placed that they are not liable to become damaged either in the normal course of conveyance or in the event of an accident to the vehicle.
- (c) An effective weatherproof vent, covered by a screen of approved metallic gauze of at least 30 meshes to the linear inch, shall be fitted to each tank and be so designed as to prevent escape of liquid should the vehicle overturn, or alternatively the tank shall be fitted with an approved pressure and vacuum relief vent that will prevent escape of liquid while permitting relief of pressure and vacuum within the tank.
- (d) The electrical system shall have the wiring so fixed and protected as to reduce the risk of damage, and a cut-off switch shall be provided and installed in the cab to isolate the battery of the vehicle which cut-off switch shall be in the open position when the vehicle is garaged.
- (e) The battery shall be located in an easily accessible position and be enclosed in a box having an electrically insulated cover.
- (f) Engine exhausts shall be carried to the front of the vehicle or otherwise fitted in an approved position.
- (g) Ullage space of not less than 3 per centum of the tank capacity shall be left when filling flammable liquids of Class 1 or Class 2 into any tank or into any compartment of a tank.
- (h) Any open hatch on a tank shall be closed and secured in an approved manner after filling.
- (i) The dip pipe of a tank shall be vented into the ullage space by means of wire gauze vents having not less than 30 meshes to the linear inch.
- (j) The tank shall be fitted with strong metal fittings at each side of the top of the tank and projecting at least 1 inch vertically above any hatch, valve, pipe or other fittings so as to protect the fittings from damage if the tank should roll over sideways, which metal fittings shall whenever practicable be in the form of inverted U coamings of not less than 1/8 inch metal.

97. (1) Power driven pumping units or metering units shall not be fitted to any vehicle used for conveyance in bulk of flammable liquid of Class I except with the approval of the Chief Inspector either generally or in a particular case, and then only if the pumping unit is of an approved type.

(2) Pumping units so approved 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 forms part of the engine of the vehicle.

98. Before flammable liquid is delivered from a tank on a vehicle into any underground tank, the person in charge shall—

- (a) ascertain and be quite sure that the underground tank will receive the quantity it is proposed to deliver; and
- (b) ensure that any connection to the fill pipe of the underground tank is securely closed gas-tight.

99. No flammable liquid of Class 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.

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 6 inches above ground on strong supports which shall be of non-combustible material.

(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 2 feet 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.

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.

116. All electrical equipment about a pipeline for flammable liquid shall comply with the Rules contained in publication Australian Standard No. CC1, Part 1, of 1961, of the Standards Association of Australia and entitled S.A.A. Wiring Rules, and with the requirements of the State Electricity Commission of Western Australia, and shall be inspected at intervals of not more than six months to ensure their continued compliance with those rules or requirements.

117. All underground pipelines for flammable liquid shall be examined by the owner at intervals not exceeding 1,500 feet at least once in every five years, and the result of each examination shall be recorded and made available to an inspector if required.

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 3 feet 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.

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 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 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 Class 1 shall be marked with the words "HIGHLY FLAMMABLE".

(2) Every package containing flammable liquid of Class 2 shall be marked with the word "FLAMMABLE", except where the flammable liquid constitutes a paint, lacquer, enamel, insecticide, polish, or similar manufactured product.

(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 unless those vehicles are of a type approved by the Chief Inspector as being exempt from special marking under subregulation (4) of that regulation.

(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 exceeding 5 gallons capacity, shall conform to the standard for thickness of metal and manner of construction contained in the publication of the Standards Association of Australia, K87-1960, entitled "Fixed End and Removable End Steel Drums", and as defined therein shall be of the following types:—

Drum Size, Gallons.	Flammable Liquid Class Number.	Type of Drum.
44	1	C or R
44	2	D or S
25	1	C or R
25	2	D or S
12½	1 and 2	D or S
8	1 and 2	D or S

(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.

129. (1) Packages for flammable liquids that are of capacity exceeding 1 gallon and not exceeding 5 gallons 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.

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 the Code S.A.A. CA.18-1964, "Maintenance of Portable Fire Extinguishers".

(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.

134. Fire extinguishers that may be required under these regulations shall be of the following types and capacity, and where reference is made to a particular type or unit of capacity, that reference shall refer to the following types of appliances and the unit capacities thereof:—

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

Type 1: Vapourising liquid types that employ as the extinguishing agent an approved halogenated hydrocarbon.
1 unit means not less than 2 pints of liquid capacity.

Type 2: Foam producing extinguishers that generate fire extinguishing foam.
1 unit means a liquid capacity of not less than 2 gallons.

Type 3: Extinguishers that deliver an inert gas being carbon dioxide or any other approved inert gas.
1 unit means not less than 7½ lbs. weight of carbon dioxide or the equivalent amount of other inert gas.

Type 4: Dry powder extinguishers that expel as extinguishing powder by means of carbon dioxide or other approved inert gas.
1 unit means a capacity of not less than 20 lbs. of powder.

Type 5: Buckets filled with clean dry sand, or bins or other containers equipped with scoops or shovels for distributing the sand.
1 unit means a total capacity of not less than 10 gallons in all buckets or containers.

- (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.

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

- (a) Drum Depots: Depots classified as Types A and B shall be provided with 1 unit each of Type 2 and of Type 4 extinguishers together with 1 unit of Type 5 extinguisher for every 2,500 square feet or part thereof of floor area in the depot. Every depot classified as Type C located within a building shall be provided with either 1 unit of Type 3 extinguisher, or one extinguisher of the dry powder type having a capacity of not less than 10 lb., or any other extinguishers that are approved for the purpose. All extinguishers at drum depots shall be located in easily accessible positions as approved by an inspector.

- (b) Pump Installations: For each six dispensing heads or part thereof on the same dispensing area there shall be provided two hand fire extinguishers which shall be located in positions approved by an inspector.

Such extinguishers shall each be of one unit capacity and one extinguisher shall be of either Type 1 or Type 3, and the other shall be of either Type 2 or Type 4.

- (c) Vehicles Conveying Packages: Every vehicle that conveys flammable liquids in total quantity exceeding 200 gallons, the liquid being in packages each exceeding 1 gallon, shall carry one fire extinguisher of the dry powder type having a capacity not less than 10 lb. of powder, or other approved hand fire extinguisher.
- (d) Tank Wagons: Tank wagons for conveyance of flammable liquids or oils shall have mounted on each vehicle one extinguisher of Type 4 having a capacity not less than 20 lb. of powder, but other types of extinguishers may be substituted if they are of number and capacity approved by the Chief Inspector for the size of the tank wagon and the Class of the liquid conveyed therein.
- (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 5,000 gallons shall be provided with one unit of Type 4 extinguisher and also one unit of Type 5 extinguisher both of which shall be located in easily accessible positions and not less than 20 feet away from any tank as approved by an inspector.

(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.

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 5,000 gallons in any one depot, the fire precautions and the provision of fire-fighting equipment and appliances shall be approved by the Chief Inspector.

(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 are stored in total quantity exceeding 20,000 gallons in all above-ground tanks there shall be—

- (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 on 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 are stored in total quantity exceeding 5,000 water tons (1,120,000 gallons) there shall be—

- (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 100 feet of 2½ inch hose to a horizontal distance of 60 feet when a nozzle of 7/8th inch 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.

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 10,000 gallons of foam where one hydrant is installed by these regulations and 20,000 gallons 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 60 feet 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.

143. Where an above-ground tank depot for the storage of flammable liquids or oils in excess of 5,000 water tons (1,120,000 gallons) 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 20 feet diameter, but otherwise such protection may or may not be installed on tanks.

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 1.2 inches of foam per minute, measured on the maximum water surface in the tank, and tanks up to 40 feet in diameter shall have at least one foam discharge inlet, tanks over 40 feet and up to 117 feet in diameter shall have two such inlets, and tanks exceeding 117 feet 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 six inches of foam on the liquid surface of the two largest tanks of either fixed roof or floating roof type; and
 - (ii) a covering of three inches 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.

(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 150 feet 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 Class 1, Class 2 or Class 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 license 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.

152. Every licence issued under these regulations shall be for one year from the date of issue and on the expiration of that time may be renewed on payment of the licence renewal fee if and so long as the storage continues to comply with these regulations.

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.

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 of 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:—

For each licensed premises in which the approved liquid storage—	\$
Does not exceed 500 gallons	2
Exceeds 500 but does not exceed 5,000 gallons	4
Exceeds 5,000 but does not exceed 10,000 gallons	10
Exceeds 10,000 but does not exceed 50,000 gallons	20
Exceeds 50,000 but does not exceed 500,000 gallons	40
Exceeds 500,000 but does not exceed 1,000,000 gallons	100
Exceeds 1,000,000 gallons	200

(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 alteration or amendment of a licence there shall be paid a fee of one dollar.

(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. 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.

Penalty.

158. 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.