

S.I. No. 311 of 1979.

**DANGEROUS SUBSTANCES (RETAIL AND PRIVATE PETROLEUM STORES)
REGULATIONS, 1979.**

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I, GENE FITZGERALD, Minister for Labour, in exercise of the powers conferred on me by sections 21 (2) (b), 22 (2), 23, 36, 37, 62 (2) and 66 of the Dangerous Substances Act, 1972 (No. 10 of 1972), hereby make the following Regulations:

PART I.

1. These Regulations may be cited as the Dangerous Substances (Retail and Private Petroleum Stores) Regulations, 1979, and shall come into operation on the 28th day of September, 1979.

2. (1) In these Regulations—

"the Act" means the Dangerous Substances Act, 1972 (No. 10 of 1972);

"approved", except where the context otherwise requires, means approved for the time being by the Minister;

"authorised person" means either a licensee who is competent to carry out duties connected with the safe keeping or storage of petroleum Class I at a retail store or private store or an employee or a member of the family of a licensee authorised in writing to carry out such duties and competent to do so;

"compartment" means a compartment forming a liquid-tight division of an underground storage tank;

"competent person" means a person possessing adequate knowledge, training and ability to perform his duties of work in such a manner as to prevent, so far as practicable, the risk of injury;

"container" means (as may be appropriate)—

(a) a suitable leak-proof metal drum of adequate strength and construction and with a capacity not exceeding 250 litres of petroleum Class I,

(b) a suitable leak-proof metal container of adequate strength and construction and with a capacity not exceeding 60 litres of petroleum Class I,

(c) a suitable leak-proof container of metal or other material of adequate strength and construction and with a capacity not exceeding 30 litres of petroleum Class I, constructed in accordance with approved standards or specifications; or

(d) a suitable leak-proof container with a secure stopper and a capacity not exceeding 5 litres of petroleum Class I;

"container compound" means an enclosed area located in a safe position in the open air at a retail store or a private store and used or intended to be used for the keeping or storage of containers;

"container store" means a container store of adequate fire-resistance construction for the safe keeping or storage of containers in or at a retail store or a private store;

"dangerous concentration of vapours" means a concentration of vapours greater than the lower flammable limit of the vapours;

"electrical apparatus" includes any conductor or electric cable, and any part of any machine, apparatus or appliance, designed for the generation, transformation, conversion, switching, controlling, regulation, storage, transmission, distribution or use of electrical energy;

"fire-resistance" means, unless otherwise specified in a condition attached to a licence, having elements of construction which will withstand (if exposed to test by fire in accordance with British Standard 476; Part 8: 1972), the effects of fire for a period of not less than 30 minutes without loss of fire-separating or load-bearing functions;

"fuel tank" means a fuel tank of a vehicle which is designed for carrying fuel for use only in the propulsion of that vehicle;

"hazardous area" means an area in which, because of the existence of petroleum Class I, an explosive or flammable atmosphere may be present continuously or intermittently, or be present because of an abnormal or transient condition;

"leaded petroleum" means petroleum Class I containing lead tetraethyl or similar lead-containing compound;

"licence" means a licence under the Act in respect of a retail store or a private store for the storage of petroleum Class I at the store, and cognate words shall be construed accordingly;

"licensing authority" means (as may be appropriate) the Minister or the proper local or harbour authority within the meaning of section 2 (2) of the Act;

"the Minister" means the Minister for Labour;

"owner" means a person who is the registered owner (within the meaning of Article 18 of the Road Vehicles (Registration and Licensing) Regulations, 1958 (S.I. No. 13 of 1958)) of a tank-vehicle or other vehicle, being in either case a vehicle used for the delivery or conveyance of petroleum Class I to a retail store or private store;

"petroleum Class I" means petroleum-spirit tested in accordance with regulations under section 20 of the Act;

"petroleum Class II" means petroleum which when tested at normal atmospheric pressure in accordance with regulations under section 20 of the Act gives off a flammable vapour at a temperature of not less than 22.8° Celsius and not more than 60° Celsius;

"petroleum-spirit" means petroleum which at normal atmospheric pressure gives off an inflammable vapour at a temperature of less than 22.8° Celsius (73°F);

"pipeline" means a pipeline for filling, dipping, drawing-off, ventilating or dispensing purposes which is connected to an underground storage tank;

"private store" means a place or premises used or intended to be used for keeping (other than for resale in whole or in part) under a licence petroleum Class I for use in any engine or in connection with the propulsion of a vehicle, ship, vessel, boat or aircraft, of any kind;

"retail store" means a place or premises used or intended to be used for the keeping for sale to the public under a licence of petroleum Class I for use in the propulsion of a vehicle, ship, vessel, boat or aircraft or in the running of an engine of any kind;

"risk of injury" means risk of injury either to persons or property from petroleum Class I (or vapours of such petroleum) because of ignition, fire, explosion, spillage, escape or leakage, or to persons while keeping, dispensing or conveying such petroleum;

"tank" means a suitable leak-proof tank container, demountable tank, fixed tank, self-bearing tank or tank having in any case a capacity exceeding one cubic metre and mounted, fixed or secured on a tank-vehicle designed and used for conveying or delivering petroleum Class I to or at a retail store or private store, but does not include a fuel tank;

"tank-semi-trailer" means either a drawn component of an articulated vehicle or a vehicle constructed or adapted for use as a drawn component of an articulated vehicle;

"tank-trailer" means a trailer comprising one or more fixed or demountable tanks;

"tank-vehicle" includes a composite vehicle, articulated vehicle, tank-trailer or tank-semi-trailer used for the delivery or conveyance of petroleum Class I to or at a retail store or private store;

"underground storage tank" means an underground storage tank located below the surface of the ground at a retail store or a private store and used, subject to Regulation 9 of these Regulations, exclusively for the storage of petroleum Class I.

(2) Any reference in these Regulations to a British Standard or other standard is a reference to that Standard as amended or extended, whether before or after the commencement of these Regulations.

3. (1) Part II of these Regulations applies to a retail store or private store licensed under section 21 (1) of the Act for the storage of petroleum Class I.

(2) Part III of these Regulations applies to the keeping without a licence of a quantity not exceeding 272.758 litres (60 gallons) of petroleum Class I for use in engines to which that Part applies.

(3) Subject to any conditions attached to a licence and without prejudice to any other provision of these Regulations, the Rules specified in Schedule 1 to these Regulations shall apply at every retail store and private store.

4. Where a licensing authority is satisfied—

(a) that a retail store or private store used for the keeping of petroleum Class I immediately before the commencement of these Regulations cannot at reasonable expense be made to comply with the requirements of Regulations 12 (2), 15 (2), 31 (2) to 31 (7), 32 to 44 of these Regulations,

(b) that either all practicable steps have been taken in relation to that store to ensure a standard of protection approximating to that required under the Regulations specified in subparagraph (a) of this paragraph against risk of injury caused by petroleum Class I or works, alterations or additions which would enable that store to comply with those Regulations will be carried out within a specified period and a written undertaking to that effect has been given by the applicant for a licence,

the licensing authority may issue a licence subject to such conditions (including conditions relating to those works, alterations or additions) as it considers necessary to attach to the licence and specifies in the licence.

PART II.

5. (1) Subject to Regulation 4 of these Regulations, in order to be eligible for the grant or renewal of a licence a retail store or a private store shall be located, constructed or arranged in accordance with the appropriate requirements of these Regulations.

(2) Every licensed retail store or licensed private store shall be maintained and used for the storage of petroleum Class I in accordance with these Regulations and any conditions attached to the licence.

6. (1) Every application for—

- (a) a first licence,
- (b) an amended licence under Regulation 11 (2) of these Regulations,
- (c) the renewal of a licence, or
- (d) the transfer of a licence,

shall be made on the form set out in Schedule 2 to these Regulations, and shall be accompanied by the fee for the time being prescribed under section 38 of the Act.

(2) Every licence shall be valid for such period not exceeding three years as may be specified in the licence and shall be in the form specified in Schedule 3 to these Regulations, and any application for the renewal of a licence shall be made not less than three months before the date on which the licence expires.

(3) Any licence or class of licence for an existing retail store or existing private store for the keeping of petroleum which is continued in force under section 8 of the Act shall expire on the expiration of the period of one year beginning at the commencement of these Regulations or on the date of expiry specified in the licence, whichever is the sooner.

(4) A person under the age of 18 years shall not be eligible for the grant of a licence.

7. Where a licensee of a retail store or private store becomes incapable (whether through death, bankruptcy, mental or physical disability or otherwise) of carrying on business, any other person may, notwithstanding any other provision of these Regulations, carry on the business for a period not exceeding one month if as soon as practicable after the commencement of that period he applies for a licence.

8. (1) A licensee of a retail store or private store shall, before transferring the occupation of a retail store or private store to any other person, give notice in writing to the licensing authority of his intention to do so and of the name and address of the person to whom he proposes to transfer occupation.

(2) Subject to paragraph (1) of this Regulation, where the ownership of a licensed retail store or licensed private store is transferred by act of the parties or by operation of law, the licensee shall forthwith inform the licensing authority of the transfer.

9. An underground storage tank and any separate compartment of such a tank shall while licensed for the storage of petroleum Class I be used exclusively for the storage of petroleum Class I, unless the licensing authority consents in writing to the use of the tank or compartment for any other purpose, and in any such case the terms of any such consent shall be complied with.

10. A licensee of a retail store or private store shall, before discontinuing the use of an underground storage tank for the storage of petroleum Class I—

(a) give not less than 21 days' notice in writing to the licensing authority of his intention to discontinue the use of the tank,

(b) take all practicable steps (including any steps required in writing by the licensing authority upon receipt of the notice required under paragraph (a)) to render the tank immune from the risk of fire or explosion.

11. (1) No work affecting the keeping or storage of petroleum Class I (except work of repair or maintenance or work required by or permitted in a condition attached to a licence) and comprising enlargement, addition, re-construction or alteration shall be carried out to or at a retail store or private store unless an application in writing for permission to do so has been made by the licensee to the licensing authority and the licensing authority gives such permission.

(2) Where work permitted under this Regulation is carried out the licensing authority shall issue to the licensee an amended licence in lieu of that which he held before the work was carried out.

12. (1) Every application for a first licence (or for the renewal of a licence continued in force under section 8 of the Act) shall—

(a) be accompanied by a plan (with 3 copies) drawn to a scale in metric units of measurement of not less than 1:2500, consisting of an extract from the Ordnance Survey map (or tracing thereof) in linen or similar durable material, or

(b) where there is not readily available an Ordnance Survey map drawn to the scale specified in subparagraph (a), be accompanied by a plan (with 3 copies) in metric units of measurement and consisting of an extract from the relevant Ordnance Survey 1:1000 map (or tracing thereof) in linen or similar durable material, and

marked and coloured so as to identify clearly the site or proposed site (including the boundaries which shall be marked in red) of the retail or private store.

(2) Every plan submitted in accordance with paragraph (1) of this Regulation shall be accompanied by—

(a) one site plan (with 3 copies) in metric units of measurement of not less than 1:100 so marked and coloured so as to identify clearly—

(i) each underground storage tank, each pipeline or dispensing pump connected to such a tank and each container store or container compound, and

(ii) all other buildings or structures (including cellars or basements) within a distance of 16 metres of each underground storage tank, offset filling point, dispensing pump, ventilating pipe opening, container store or container compound;

(b) one plan and specification or appropriate particulars (with three copies), including suitable drawings or plans, elevations and sections to a scale in metric units of measurement of not less than 1:50 so marked as to give adequate details of the construction or proposed construction and dimensions and manner of installation or proposed installation of each underground storage tank, dispensing pump, container store, container compound and any pipeline (including its diameter);

(c) one plan or specification or appropriate particulars (with three copies) shall be so marked as to show all electrical apparatus installed or to be installed or used at a distance not exceeding 5 metres of each underground storage tank, container store, container compound, dispensing pump or filling, dipping or venting openings of an underground tank or pipeline;

(d) detailed particulars to be shown on a plan of—

(i) each building or place at a retail store or private store in or at which any articles, materials or substances (other than petroleum Class I) liable to spontaneous combustion or ignition or otherwise flammable or dangerous are kept or to be kept and their amounts or quantities,

(ii) the amount or quantity of petroleum Class I kept or to be kept in each underground storage tank, container store or container compound,

(iii) the approximate maximum number of persons employed or likely to be employed at the store and where applicable in each building at the store;

(e) any further particulars, maps or drawings shall be provided which the licensing authority requires by a notice in writing.

(3) Every application for an amended licence under Regulation 11 (2) of these Regulations shall be accompanied by—

(a) one plan (in metric units of measurement) or specification or appropriate particulars (with three copies) giving details of the proposed installation, alteration, enlargement, addition or reconstruction, and

(b) any further particulars, plans, maps or drawings which the licensing authority requires by notice in writing.

13. The licensee of a retail store or private store shall—

(a) take or cause to be taken all practicable steps necessary to remedy any defect, condition or circumstances likely to cause risk of injury or danger to life or property from any other flammable liquid or dangerous substance,

(b) investigate any suspected leakage from any storage tank or container of petroleum Class I and at his own expense carry out any test, examinations, demolition work, alteration or construction required by the licensing authority, and

(c) send or cause to be sent to the licensing authority written notice of any leakage, suspected leakage or escape of petroleum Class I likely to cause risk of injury from a licensed underground storage tank or pipeline connected to such tank.

14. (1) Except as otherwise specified in a condition attached to a licence, there shall not be delivered, stored or dispensed at a retail store or private store—

(a) petroleum Class II,

(b) commercial butane,

(c) commercial propane,

(d) liquefied petroleum gas,

(e) liquefied natural gas,

(f) carbide of calcium, or

(g) any other flammable, explosive or other substance likely to cause a risk of injury to person or property.

(2) In this Regulation—

"commercial butane" means a hydrocarbon mixture consisting mainly of butane or butylene or any mixture containing butane or butylene;

"commercial propane" means a hydrocarbon mixture consisting mainly of propane or propylene or any mixture containing propane or propylene;

"liquefied petroleum gas" means commercial butane or commercial propane or any mixture containing commercial butane or commercial propane;

"liquefied natural gas" means a hydrocarbon mixture consisting mainly of methane from an oil-field source and held in a liquefied state by the application of pressure or refrigeration or pressure and refrigeration.

15. (1) During the transfer of petroleum Class I from a tank of a tank-vehicle to an underground storage tank at a retail store or private store, the tank vehicle shall be located at a safe place marked in a plan annexed to the licence and, when the transfer takes place during hours of darkness, artificial lighting sufficient and suitable to allow the transfer to be made without risk of injury shall be provided at that place by the licensee.

(2) Subject to Regulations 41 (1) and 41 (2) of these Regulations and unless otherwise provided in a condition attached to a licence—

(a) the place referred to under paragraph (1) of this Regulation shall be of sufficient area to enable a tank vehicle to be adequately and safely accommodated in the area during the transfer referred to in that paragraph;

(b) the surface area of the ground used to accommodate a tank-vehicle during such a transfer and within a radius of not less than 4 metres of a petroleum dispensing pump shall be suitably covered with an adequate thickness of concrete or other suitable material and shall be—

(i) impervious and non-absorbent so as to prevent seepage or escape of petroleum below ground,
(ii) properly maintained and in good condition, and
(iii) provided with a suitable drainage system designed and graded for draining rain, other water, petroleum and any other liquid off into an adequate oil interceptor (provided by the licensee and maintained in an efficient state).

(3) Without prejudice to the requirements of subparagraph (2) (b) (iii) of this Regulation, all practicable steps shall be taken by the licensee to prevent the escape (by leakage, seepage or otherwise) of petroleum below ground or into any drain, sewer, canal, lake, stream, river, sea or inlet of the sea, or other watercourse, ditch or public place from a container store or compound or other part of a retail store or private store.

(4) In this Regulation "oil interceptor" means an oil interceptor, separator, chamber or other device approved by the licensing authority and suitably designed, constructed, vented in a safe manner and maintained so as to retain for recovery and for safe disposal any petroleum conveyed to it by a drainage system.

16. A licensee shall not permit the dispensing by self-service of petroleum Class I at a retail store without the approval in writing of the licensing authority and unless any conditions attached to the licence and relating to self-service are observed.

17. (1) Except where otherwise approved in writing by a licensing authority, petroleum Class I shall not be kept at a retail store or private store other than—

(a) in a suitable underground storage tank,
(b) in a dispensing pump or suction pipeline connected to such a pump for the purpose of delivery,
(c) in a container in a container store or container compound except when the container is being conveyed, handled or in use in connection with any operation or process at the store, or
(d) in the fuel tanks of vehicles (other than vehicles present for fuelling purposes) but subject to such maximum aggregate quantity as may be specified in any condition attached to the licence for that store.

(2) Except where a container has been adequately purged or otherwise rendered free of all traces of petroleum Class I (or any residue or vapour of such petroleum), it shall be maintained in a leak-proof condition and securely closed by means of a suitable stopper so as not to allow any leakage or escape of petroleum except when petroleum is being placed in or being transferred from the container.

(3) The materials constituting a container shall not be liable to suffer deterioration resulting from any reaction (whether chemical or otherwise) with petroleum Class I nor be liable to form harmful or dangerous compounds with such petroleum, and no container other than a metal container shall be used for the keeping of petroleum Class I unless approved of by the licensing authority.

(4) A stopper provided on a container in accordance with the requirements of paragraph (2) of this Regulation shall be so secured that it will not loosen and it (together with the container as a whole) shall be capable of safely withstanding the stresses or strains of any handling or pressure likely to be incurred during its normal use.

(5) A container shall not be filled beyond 95 per cent of its capacity.

18. (1) Petroleum Class I shall not be dispensed or conveyed from an underground storage tank or a separate compartment of such a tank at a retail store or private store except—

(a) by means of a dispensing pump located at the position marked on a plan annexed to the licence, or

(b) for the purpose of emptying the tank or separate compartment to remove petroleum or residue of petroleum from under the intake-opening of a suction pipe.

(2) The licensee of a retail store or private store shall—

(a) give to the licensing authority not less than 7 days' notice in writing of his intention to remove petroleum Class I or residue of such petroleum from under the intake-opening of a suction pipe of an underground storage tank or separate compartment of such a tank; but this requirement shall not apply to the removal, by safe means and by a competent person, of normal quantities of water which may accumulate from time to time in the tank,

(b) ensure that an authorised person supervises such a removal and the disposal of such petroleum or residue,

(c) comply with any requirement of the licensing authority for the purpose of protecting person or property while such an operation is being carried out, and

(d) when disposing of or depositing any residue or sludge of petroleum Class I or scale from an underground storage tank, do so in a safe manner and in accordance with any conditions attached to the licence.

(3) A person shall not sell, remove or cause to be removed from a retail store or private store any underground storage tank that has contained petroleum Class I without giving to the licensing authority not less than 21 days' notice in writing of his intention to do so, and shall comply with any requirement imposed by the licensing authority in relation to such a sale or removal for the protection of persons against risk of injury.

19. (1) Except as otherwise specified in a condition attached to a licence, petroleum Class I shall not be transferred to a container by a dispensing pump at a retail store or private store unless the container—

(a) has a capacity not exceeding 25 litres,

(b) is securely closed immediately after completion of the dispensing operation so as not to allow any leakage of petroleum, and

(c) is placed in a licensed container store or licensed container compound or immediately removed from the private store or retail store.

(2) Petroleum Class I shall not be dispensed from a container having a capacity exceeding 45 litres except by the use of a suitable barrel pump, or other device suitable for the purpose, having a vapour-tight seal.

20. (1) Subject to any condition attached to a licence, a licensee shall take all practicable steps to ensure that petroleum Class I is not transferred from a tank of a tank vehicle to an underground storage tank or separate compartment of such a tank—

(a) unless, so far as is reasonably practicable, adequate means for summoning assistance in an emergency is available,

(b) unless an authorised person is in charge of the underground storage tank or separate compartment—

(i) to keep during the transfer a watch on the storage tank or separate compartment,

(ii) to ensure that petroleum Class I does not overflow or escape from the tank or at the filling point of the tank or compartment or at any point between the tank or compartment and the filling point,

(c) unless the authorised person in charge of the underground storage tank or separate compartment—

(i) has immediately before the commencement of the transfer tested the tank or compartment with the appropriate dipping stick or other measuring device required to be provided under Regulation 33 (3) of these Regulations and the test has shown that the quantity of petroleum Class I to be transferred from the tank-vehicle can safely be accommodated in the tank or compartment,

(ii) has taken all practicable steps to ensure that the connecting hose through which the petroleum is to be transferred is properly and securely connected to the filling point of the tank or compartment, and that (so far as can be ascertained) all pipes through which the petroleum will pass between the filling point and the tank or compartment are properly and securely connected to each other or (as the case may be) to the storage tank or compartment and are otherwise in good order, and has also taken all practicable steps to ensure that the connecting hose is properly and securely connected to the delivery tank of the tank-vehicle,

(iii) has, where there is a dipping opening (other than a combined filling and dipping opening which is being used for the transfer operation) provided in the tank or compartment, ensured that the opening is securely closed, and

(iv) has complied with the requirements of subparagraphs (c) (i), (c) (ii) and (c) (iii) before signing his name on the certificate referred to in subparagraph (d) of this paragraph,

(d) until the authorised person in charge of the underground storage tank or separate compartment—

(i) has on each of two copies of a certificate in the form set out in Schedule 4 to these Regulations entered in the first column the number of the tank or compartment and in the second column opposite to the entry in the first column the quantity and grade of petroleum Class I which is to be transferred into the tank, and

(ii) has in the presence of and witnessed by the person attending the tank-vehicle signed opposite to the entry in the first column his name on each of two copies of the certificate in the third column,

(iii) has given a copy of the certificate duly completed to the person attending the tank-vehicle from which the transfer is made.

(2) A copy of a certificate duly completed in accordance with paragraphs (1) (c) (iv) and (1) (d) (i) of this Regulation shall be kept by the licensee and another by the owner of the tank-vehicle for a period of not less than six months after the transfer.

21. (1) Subject to any condition attached to a licence, a carrier shall ensure that no petroleum Class I is transferred from a tank of a tank-vehicle of which he is the owner into an underground storage tank at a retail store or private store—

(a) unless a person (who shall not be in the cabin of the vehicle during the transfer) is in charge of the tank-vehicle so as to keep during the transfer a constant watch on the tank from which, and the connecting hose through which, the transfer is to be made to the underground storage tank,

(b) unless, so far as is reasonably practicable, adequate means for summoning assistance in an emergency is available to the person attending the tank-vehicle,

(c) unless every connecting hose through which the petroleum is to be transferred is in good order and adequately and securely connected in an efficient manner, both to the tank and to the filling opening of the underground storage tank or separate compartment, and all practicable steps are taken to prevent spillage, leakage by evaporation or otherwise or overflow of petroleum during the transfer,

(d) unless all practicable steps are taken and maintained during the transfer to prevent any generation, accumulation or discharge of static electricity which would be sufficient to ignite vapours of petroleum Class I or otherwise cause risk of injury,

(e) unless the person in charge of the tank-vehicle—

(i) is satisfied that the authorised person in charge of the tank or compartment there has on each of two copies of a certificate in the form set out in Schedule 4 to these Regulations entered in the first column the number of the tank or compartment and in the second column opposite that entry the quantity and grade of petroleum to be transferred into that tank or compartment,

(ii) witnesses in the third column opposite the entry in the first column the signature of the authorised person in charge of the tank or compartment on each of the two copies of the certificate referred to in subparagraph (i),

(iii) has received a copy of the certificate on which entries have been made in accordance with Regulations 20 (1) (c) (iv) and 20 (1) (d) (i) of these Regulations.

(2) Adequate precautions shall be taken by the carrier or person in charge of a tank-vehicle during the transfer from the tank of the vehicle of petroleum Class I at a retail store or private store to ensure that—

(a) the vehicle is stationary in the appropriate area as specified by the licensing authority,
(b) the vehicle is prevented, by applying the brakes or other such means as may be necessary, from inadvertent movement,
(c) the engine of the vehicle is stopped and not set in motion—
(i) during the transfer of the petroleum from the tank to the underground storage tank, or
(ii) before any hose, filling pipe or draw-off pipe opening or other opening of the tank or storage tank has been securely closed,
(d) mechanical or electrical repairs or any other adjustments are not made to the vehicle during the transfer of petroleum from the tank to the underground storage tank.
(3) Subject to any condition attached to a licence, the owner of a tank-vehicle or other vehicle engaged in the delivery or transfer of petroleum Class I at a retail store or private store shall take all practical steps to ensure that—

(a) every tank of the vehicle is leak-proof and that it and its connections or fittings are reasonably clean, maintained in good condition, and free from defect,
(b) a container of petroleum Class I is not delivered by him to a retail store or private store unless the container is in good condition and securely stopped,
(c) all necessary precautions are taken to prevent the risk of ignition, fire or explosion,
(d) a person shall not (or be required to)—
(i) gain access to or remain on the upper surface or catwalk of any tank-vehicle conveying petroleum Class I,
(ii) transfer petroleum Class I from a tank to a storage tank,
(iii) carry out manual gauging of a tank
during a thunder storm accompanied by lightning,

(e) the fuel tank of a vehicle shall not be filled or replenished with petroleum Class I direct from a tank of a tank-vehicle.

(4) The owner of a tank-vehicle engaged in the delivery or transfer of petroleum Class I at a retail store or private store shall take all practicable steps to ensure that—

(a) not less than one portable fire-extinguisher, capable of extinguishing burning petroleum or a fire in a vehicle engine, of adequate capacity and maintained in an efficient state and available for immediate use is carried in a safe, secure and easily accessible position on the vehicle and on any trailer of the vehicle (whether the trailer is attached to the vehicle or not) and that the extinguishing agents of such an extinguisher shall not be liable to release toxic or other harmful gases into the driver's cab or under influence of heat from a fire,
(b) the driver of the vehicle or other person employed by him in the transfer or delivery of petroleum Class I at a retail store or private store is adequately instructed and trained in the use of any fire extinguisher carried on or used in connection with the vehicle,
(c) the driver of the vehicle is supplied with a safety manual containing adequate written instructions specifying—
(i) the nature of the dangers inherent in petroleum Class I and of precautionary measures necessary to be observed,
(ii) the steps to be taken and treatment to be given in the event of a person or clothing being affected by contact with petroleum Class I or vapours of such petroleum,
(iii) the steps to be taken (including procedures for contacting fire brigade authorities or the Garda Síochána) in the event of spillage or escape of petroleum Class I or in the event of fire or any other accident or emergency,
(iv) any fire-fighting equipment or extinguishing agent which is not to be used to control or extinguish petroleum fires,
(v) the steps to be taken in the event of a breakage, defect or deterioration of any tank, pipeline, hose or other connections or containers used for the conveying of petroleum Class I.

22. (1) Petroleum Class I shall not be drawn off or transferred from a fuel tank of a vehicle at a retail store unless—

- (a) with the consent of and under the supervision of an authorised person,
- (b) the engine of the vehicle is stopped,
- (c) the vehicle is in a safe position either in the open air or in an adequately ventilated space and all necessary precautions have been taken to prevent any ignition, fire or explosion,
- (d) it is being transferred directly in a safe manner into a suitable container which is of adequate capacity to contain the total contents of the fuel tank.

(2) Immediately a transfer referred to in paragraph (1) of this Regulation has been completed, the container shall be securely closed by a liquid and vapour-tight stopper or cap to prevent any leakage or escape of petroleum.

23. (1) A licensee shall take all practicable steps to ensure that a person shall not be required to work at any place in connection with the keeping of petroleum at a retail store if he is liable to be exposed to bodily injury from petroleum, unless effective measures have been taken and are maintained to ensure his safety.

(2) Anything which is likely to ignite vapour from petroleum Class I shall not be present where a dangerous concentration of vapours from petroleum Class I may reasonably be expected to be present.

(3) A licensee of a retail store or private store shall at the request in writing of the licensing authority provide and have available at all times and ready for immediate use a suitable combustible gas indicator instrument maintained in an efficient state for detecting or evaluating a dangerous concentration of vapours at the store.

24. (1) Subject to Regulation 23 of these Regulations and to any conditions attached to a licence, all practicable steps shall be taken by the licensee of a retail store or private store to ensure that—

(a) electrical apparatus is designed, installed, protected, worked and maintained so as to prevent risk or injury so far as is reasonably practicable;

(b) electrical apparatus likely to ignite vapours of petroleum Class I is not located in a hazardous area unless the apparatus is so constructed and protected and such special precautions are taken so as adequately to prevent danger by ignition, fire or explosion or otherwise through exposure or use.

(2) All practicable steps shall be taken by a licensee or carrier to prevent any generation, accumulation or discharge of static electricity where a dangerous concentration of vapours from petroleum Class I may reasonably be expected to be present.

(3) Subject to any conditions attached to a licence, a licensee shall make, and secure the effective carrying out of, arrangements for the inspection and testing at intervals not exceeding three years by a competent person of all electrical apparatus located in a hazardous area and of all parts of every circuit of such apparatus, including—

(a) the verification of polarity,

(b) the effectiveness of the earth loop impedance,

(c) the conductance of the earth conductor and earth plate or earth rods,

(d) the effectiveness of every earth-leakage circuit breaker,

(e) the insulation resistance of every circuit, and

(f) the suitability, effectiveness and condition of all cables, switches, fuses, plugs and socket outlets having due regard to the other provisions of this Regulation, and

a certificate, in such form as may be approved by the licensing authority, of the results of every such inspection and test and shall be kept available by a licensee for inspection by the licensing authority.

25. (1) Without prejudice to any other provision of these Regulations, a person shall not smoke at or in any place where petroleum Class I or vapour of such petroleum is present or where the circumstances are such that smoking would give rise to the ignition of fire or explosion.

(2) A licensee shall take all practical steps to ensure compliance with paragraph (1) of this Regulation, including the display in a prominent position of a notice clearly indicating that smoking is prohibited at or in the place concerned.

26. Petroleum shall not be ignited at a retail store unless—

- (a) the ignition is for the sole purpose of disposing of the petroleum as waste,
- (b) the ignition is carried out by safely burning the petroleum in plant or apparatus suitable for the purpose and by an authorised or competent person in a safe place, and
- (c) any relevant conditions attached to the licence relating to the store are complied with.

27. A person under 15 years of age shall not be permitted to carry out any work or operation in connection with the conveyance, dispensing or storage of petroleum Class I at a retail store or a private store.

28. Subject to Regulation 31 (1) of these Regulations and to any condition attached to a licence by a licensing authority and relating to the suspected soundness or integrity of any underground storage tank or connected pipeline and to the need for precautions to be taken against the risk of leakage from the tank or pipeline, or where such a tank has been installed for at least 20 years at a retail store or private store, the licensee shall—

(a) ensure at intervals but not exceeding 7 days—

- (i) that the quantity of petroleum in the underground storage tank or any separate compartment of such a tank is recorded immediately after being measured with the proper measuring device,
- (ii) that an accurate meter reading of each dispensing pump connected to the underground storage tank or any separate compartment of such a tank is taken and immediately recorded, and
- (iii) that no petroleum Class I shall be placed in or removed from the underground storage tank or separate compartment in the period between measuring the contents of the tank and taking the meter readings,

(b) retain for a period of not less than six months records in a form approved by the licensing authority of—

- (i) the contents of the underground storage tank or separate compartment as recorded under paragraph (a) (i) of this Regulation,
 - (ii) the meter readings of each dispensing pump as recorded,
 - (iii) the quantities or amounts of petroleum Class I delivered to the tank or separate compartment, and
- (c) produce at any reasonable time at the request of the licensing authority any records retained under paragraph (b) of this Regulation.

29. Notwithstanding Regulation 28 of these Regulations, whenever there is reasonable cause to suspect leakage of petroleum from an underground storage tank used for the storage of petroleum Class I, the licensing authority may serve a notice in writing on the licensee requiring him to keep (or cause to be kept) a continuous check on the contents of the underground storage tank, and the licensee shall comply with the notice.

30. (1) A person shall not be employed in connection with the storage, conveying or dispensing of petroleum Class I at a retail store or private store unless he has received (and where necessary continues to receive) adequate training, which shall include suitable instruction by a competent person before and during his employment, in the precautions to be taken under these Regulations—

- (a) for the protection of his health and for his safety, and
- (b) to prevent risk of injury.

(2) Without prejudice to the generality of paragraph (1) of this Regulation, the training required under that paragraph shall include where appropriate—

- (a) the manner and importance of observing the Rules set out in Schedule 1 to these Regulations,
- (b) the function, operation and use of electrical or other devices for controlling or regulating the delivery of petroleum Class I to underground storage tanks or to the fuel tanks of vehicles,
- (c) the steps to be taken in the event of leakage of petroleum Class I from a hose, pipeline, fuel tank of a vehicle or filling-pipe thereof or container, or in the event of spillage or escape of petroleum Class I or fire or in the event of any other accident or emergency including procedures for contacting fire brigade authorities or the Garda Síochána,
- (d) the efficient use of fire-fighting equipment provided under these Regulations at a retail store or private store, the proper extinguishing agents for use with such equipment and knowledge of extinguishing agents which may not be used,
- (e) the steps to be taken and treatment to be given in the event of a person or clothing being affected by contact with petroleum Class I or vapours of such petroleum,
- (f) the carrying out of elementary first aid procedures.

31. (1) Notwithstanding any other provision of these Regulations, every underground storage tank and every pipeline connected to such a tank shall be of suitable design, good construction, sound material and adequate strength for the purpose for which it is used and so installed, pressure tested, protected and maintained as adequately to prevent any leakage of petroleum.

(2) Without prejudice to the requirements of paragraph (1) of this Regulation, every underground storage tank shall—

- (a) be a horizontal cylindrical type with the shell plated circumferentially, and shall consist of dished and flanged ends or, if it is a compartmented tank, shall have each dividing plate which separates compartments dished and flanged,
- (b) conform to the dimensions and capacities set out in Part I of Schedule 5 of these Regulations, and to the dimensions set out in Part II of that Schedule for dished and flanged dividing plates and ends,
- (c) be constructed of good quality carbon steel plate not less than 6 millimetres in nominal thickness with all seams adequately welded throughout, except that—
 - (i) in the case of a tank of not less than 2,500 millimetres internal diameter, the dividing plate separating compartments shall be not less than 8 millimetres in nominal thickness, and
 - (ii) the minimum thickness of a manhole lid or manhole flange to which the lid is secured shall not be less than 10 millimetres,
- (d) be provided with a suitably located manhole which shall be adequately fabricated and, in the case of a tank not exceeding 2,000 millimetres inside diameter, be not less than 460 millimetres diameter and, in the case of a tank exceeding 2,000 millimetres inside diameter, be not less than 600 millimetres diameter, and each separate compartment of such a tank shall also comply with this subparagraph, or
- (e) be provided with suitable and adequate connections for filling, venting, gauging or measuring its contents or removal of its contents, or
be constructed of approved material and in accordance with approved standards and specifications of the licensing authority.

(3) Where a dip-stick is used for measuring the contents of an underground storage tank, the tank shall be provided with a reinforcing pad of steel of adequate surface area and thickness, which shall be properly located and suitably welded to the surface of the bottom of the tank to prevent or mitigate damage to the shell of the tank by the dip-stick.

(4) In relation to an underground storage tank manufactured after the date of the commencement of these Regulations, the following particulars shall be permanently and clearly marked on a suitable nameplate attached adjacent to the manhole or stamped on the manhole neck or lid:—

- (a) the number (if any) of the standard or specification to which the tank was manufactured;
- (b) the test pressure (applied by the manufacturer) and the date of the test;
- (c) the nominal capacity in cubic metres or litres of the tank or compartment;

- (d) the manufacturer's name or trade mark;
- (e) the manufacturer's reference number.

(5) A valid, signed and dated copy of a test certificate, recording the results of the pressure test carried out by the manufacturer of an underground storage tank, shall be supplied by the licensee to the licensing authority before the tank is installed below ground.

(6) For the purposes of enforcing the provisions of these Regulations relating to the inspection, examination, testing or certification of a container, storage tank or pipeline or any part of fitting thereof which is required to be undertaken or carried out pursuant to a requirement of these Regulations, an inspector shall—

- (a) have free and ready access at all reasonable times to those parts of premises in which the manufacture, testing or maintenance of the container, storage tank or pipeline is carried on, and
- (b) be afforded all reasonable facilities by the owner or occupier of the premises or his agents for the efficient carrying out of his duties.

(7) For the purposes of this Regulation "nominal thickness" means plus or minus 4 per cent tolerance in the finished thickness of the steel plate as produced by the manufacturer.

32. (1) Subject to any conditions as may be attached to a licence an underground storage tank shall—

- (a) be located outside the bund area of any above-ground tank used for the storage of petroleum,
 - (b) be separated from every other underground storage tank by a distance of not less than 150 millimetres,
 - (c) be set level below ground,
 - (d) except for a manhole opening, be surrounded or encased in a suitable and adequate manner on all outer surfaces by concrete not less than 150 millimetres in thickness or, where the licensing authority so approves in writing, be placed in a suitable and adequate chamber—
 - (i) the wall surround and floor of which shall be constructed of concrete not less than 150 millimetres in thickness, and
 - (ii) except for any manhole opening, be completely surrounded by non-corrosive clean washed sand not less than 150 millimetres in thickness,
 - (e) in the case of a manhole—
 - (i) be enclosed in a suitable inspection chamber of concrete of adequate construction, the walls of which shall not be less than 150 millimetres in thickness,
 - (ii) be provided with a suitable cover of adequate strength and construction, which shall be so arranged or fitted as to prevent the ingress of surface water or other liquid to the manhole chamber.
- (2) No underground storage tank at a licensed retail store shall have a rated capacity exceeding 40,000 litres.

(3) The ullage of an underground storage tank or compartment of such a tank shall be not less than 5 per cent in the case of a rated capacity not exceeding 20,000 litres and not less than 4 per cent in the case of a rated capacity of not less than 20,000 litres but not exceeding 40,000 litres.

(4) Subject to any conditions attached to a licence, the centre point of a manhole opening or offset filling-pipe opening in an underground storage tank or of a dispensing pump used for the delivery of petroleum to a fuel tank of a vehicle shall be located in the open air and at a distance of not less than 4.25 metres from—

- (a) the boundary of a retail store or any opening in a building or any fixed source of ignition sufficient to ignite vapours of petroleum Class I,
 - (b) a public road, unless separated from the road by a screen of adequate fire-resistance construction not less than 1.80 metres in height above the surrounding ground level and of such length that any opening to the road is not less than 4.25 metres from the centre point of the manhole or of the offset filling point opening or the dispensing pump.
- (5) In this Regulation—

"concrete" means concrete adequately compacted and comprising one part of Portland cement (sulphate-resisting where necessary) two parts of dry, clean, sharp sand graded to pass 5 millimetres mesh and four parts of clean gravel or crushed stone graded to pass 20 millimetres mesh, or other concrete to a specification approved in writing by the licensing authority concerned.

"public road" means a road the responsibility for the maintenance of which lies on a road authority;

"road authority" means—

- (a) the council of a county,
- (b) the corporation of a county or other borough, or
- (c) the council of an urban district.

33. (1) Every underground storage tank or separate compartment of such a tank for the storage of petroleum Class I at a retail store or private store shall be permanently and clearly marked or suitably identified by a number easily located for operational purposes.

(2) Subject to paragraph (1) of this Regulation, where there is more than one underground storage tank or compartment tank for the storage of petroleum Class I at a retail store or private store, the number of each such tank or separate compartment shall be arranged as to enable each tank or compartment to be readily identified.

(3) Every underground storage tank or, where such a tank is divided into two or more separate compartments, every such compartment shall be provided with an effective device or means for measuring the quantity of petroleum Class I in the tank or separate compartment, and every such device or means shall be accurately calibrated and clearly marked so as to be readily identifiable with its respective tank or separate compartment and, where the measuring device is a dip-stick, it shall be made of suitable material incapable of causing a spark when brought into contact with the tank or its fittings and maintained free from defect.

(4) The upper end of each dipping and filling-pipe connected through the manhole lid of an underground storage tank or separate compartment of such a tank shall be clearly marked so as to be readily identifiable with the distinguishing number or letter marked on the tank or (as the case may be) on the separate compartment.

(5) Where the method of filling an underground storage tank (or separate compartment of such a tank) for the storage of petroleum Class I at a retail store or private store is by means of a filling-pipe leading from the tank or separate compartment to a filling point not situated on, or immediately adjacent to, the tank itself, the filling pipe at its intake end shall be clearly marked as to be readily identifiable with the distinguishing number marked on the tank or (as the case may be) on a separate compartment thereof, and adequately enclosed or surrounded so as to exclude water, rain or other liquid and to prevent access to the filling pipe by an unauthorised person.

34. (1) No opening or pipe shall be provided in an underground storage tank or separate compartment of such a tank other than for filling, dipping or ventilating or suction purposes.

(2) (a) Where an underground storage tank or separate compartment is filled by means of a direct filling-pipe, the filling-pipe shall be a combined filling and dipping pipe.

(b) Where an underground storage tank or separate compartment is filled by means of an offset filling-pipe, there shall be no opening in the pipe for dipping purposes, and the contents of the tank or separate compartment shall be gauged or measured by a suitable measuring device other than a dip-stick.

(c) (i) Where an underground storage tank or separate compartment is filled by means of an offset filling-pipe there shall be provided in the manhole lid a suitable separate opening for dipping.

(ii) The opening shall be used only by a competent person at such intervals as may be necessary to determine the extent, if any, of water accumulation in the tank or compartment and shall, except when in use, be permanently and firmly closed by a suitable liquid and vapour-tight screwed tapered plug which shall not be removed at any time for measuring or gauging the petroleum contents of the tank.

(iii) The opening shall not be used during a transfer of petroleum into the tank.

(3) No pipe or pipeline shall be connected to an underground storage tank or separate compartment of such a tank unless the pipe or pipeline is located in or passes through a manhole lid of a tank and above the maximum liquid level in the tank.

(4) No connection shall be provided in a manhole lid of an underground storage tank or separate compartment thereof other than—

- (a) a screwed combined dipping and filling socket which shall be a double tapered type,
 - (b) a flanged suction pipe or pipes not exceeding 55 millimetres nominal internal diameter,
 - (c) a screwed ventilating socket,
 - (d) a screwed tapered socket for a water dip, where an offset filling-pipe is provided, or
 - (e) a connection permitted in any condition attached to the licence,
- which shall, where provided, be of adequate strength and properly installed.

(5) A filling or dipping pipe or suction pipe of an underground storage tank or separate compartment of such a tank shall be of suitable design, adequate strength and properly installed and—

(a) in the case of a filling or dipping pipe, carried down to a vertical distance not exceeding 50 millimetres from the bottom of the tank,

(b) in the case of a suction pipe, so carried down that its intake opening for withdrawing or discharging purposes is not less than 12 millimetres (measured vertically above the bottom of the filling or dipping pipe openings) and arranged and constantly maintained so as to provide an adequate liquid seal in the tank.

(6) Notwithstanding any other provision of these Regulations, a pipeline connected to an underground storage tank or separate compartment of such a tank shall—

(a) be capable of withstanding in a safe and secure manner the maximum working pressure or stress to which it is likely to be subjected in use,

(b) be adequately protected on all exterior surfaces against corrosion,

(c) be (except for the purposes of delivering or discharging petroleum) incapable of collecting or retaining any liquid in the pipeline and shall have a slope in the pipeline towards the tank of not less than 10 millimetres to the metre,

(d) subject to any conditions specified by the licensing authority, be constructed of suitable materials of adequate strength not incompatible with petroleum Class I and resistant to the action of such petroleum under normal operating conditions.

35. (1) The inlet or outlet connection of a connecting hose or pipe through which petroleum Class I is conveyed from a tank of a tank-vehicle to an underground storage tank or separate compartment of such a tank at a retail store shall be designed and constructed to ensure at all times during the conveying operation—

(a) that an adequate leak-proof and vapour-tight screwed connection is provided and maintained at the outlet of the tank of the vehicle and at the filling-pipe intake opening of the storage tank or separate compartment thereof, but a suitable coupling device may be used in conjunction with or in addition to the screwed connection if—

- (i) the coupling is capable of providing and maintaining a leak-proof and vapour-tight connection, and
- (ii) the device is authorised by the licence;

(b) that the screwed connection or coupling device under subparagraph (a) of this paragraph is incapable of being connected at a licensed retail store to an underground storage tank or separate compartment which is used other than for the storage of petroleum Class I.

(2) An exposed pipeline connected to an underground storage tank at a retail store or private store in which petroleum Class I, petroleum Class II or petroleum Class III is being conveyed or stored shall be adequately marked by means of a suitable colour coding system approved by the licensing authority.

(3) A filling or dipping pipe opening of an underground storage tank or separate compartment of such a tank shall be kept, except when not in use, constantly and securely closed or locked by means of an adequate leak-proof and vapour-tight screwed cap or cover to prevent access to the filling or dipping pipe opening by an unauthorised person.

(4) Every underground tank or separate compartment shall be adequately protected, so far as is reasonably practicable, against external damage and access by an unauthorised person.

36. (1) Every underground storage tank or separate compartment of such a tank shall be separately vented to the atmosphere by means of a suitable ventilating pipe—

(a) not less than 1.50 metres from the boundary of a retail store, unless there is provided an adequate intervening screen wall extending from ground level upwards and for a distance in all directions of not less than 1.50 metres beyond the discharge outlet or orifice of the ventilating pipe,

(b) which permits the free escape to the atmosphere of air or vapour from the storage tank or separate compartment, and the nominal internal diameter of the pipe shall be not less than 40 millimetres and sufficient to permit the free escape of air or vapour to the atmosphere when the storage tank or separate compartment is being filled at its safe maximum intake capacity,

(c) which projects inside the tank or compartment for a distance not exceeding 25 millimetres,

(d) which prevents the collection or retention of rainwater or other liquid in the pipe,

(e) located so that its outlet or orifice to the atmosphere terminates in the open air—

(i) not less than 4 metres above the surrounding ground level,

(ii) not less than 0.20 metres higher than the maximum liquid level of petroleum Class I in the tank of a tank-vehicle in its standing position whilst delivering that class of petroleum at a retail store or private store,

(iii) not less than 6 metres measured horizontally from a dispensing pump,

(iv) in such a position that any fume or vapour emitted from the pipe discharges upwards and cannot be trapped under eaves or other obstructions of buildings or enter or be drawn into any building or enter structure or confined space by means of an air intake opening, opening window, door or other opening,

(v) not less than a vertical distance of 1.50 metres from any opening or entry to a basement or other area below ground level, and

(vi) is provided with an effective corrosion resistant and flame-arresting device incorporating a weather-proof hood to prevent leaves, dirt, rain, or other matter gaining access to the ventilating pipe, and the effective air outlet openings of the device or hood shall be not less than the internal diameter of the pipe.

(2) Every ventilating pipe provided under paragraph (1) of this Regulation shall be so supported and protected as not to be liable to foreseeable physical or mechanical damage.

(3) All practicable steps shall be taken to prevent air locks within an underground storage tank or separate compartment of such a tank.

37. (1) Before an underground storage tank is lowered into its excavation precautions shall be taken by the licensee—

(a) to remove all oil, grease, dirt, scale, rust or other surface contamination from its exterior surface, which shall be clean and dry before applying any protective coatings in pursuance of paragraph (b) of this Regulation,

(b) to prevent, so far as is practicable, corrosion of exterior surfaces by the application of not less than one coating of a suitable primer paint and thereafter two adequate coatings of corrosion resistant bituminous paint or other means of protection acceptable to the licensing authority.

(2) Adequate precautions shall be taken by the licensee—

(a) to ensure that the protective coatings of the tank applied under paragraph (1) (b) of this Regulation are not damaged or impaired in the process of lowering the tank into the excavation or in the process of encasing the tank or in filling the excavation,

(b) to ensure that the tank shall be carefully lowered into its excavation by the use of suitable lifting lugs (which shall be provided on the tank) or other suitable means, and

(c) to support properly the sides of every excavation for an underground storage tank to prevent the fall or dislodgement of earth or material likely to cause danger to any person who may be in the excavation for the purposes of duties under these Regulations.

38. (1) An underground storage tank or pipeline connected to such a tank shall not be laid, buried or installed below ground in any excavation unless—

(a) the excavation has been examined by the licensing authority before the replacement of any unsatisfactory material by suitable compacted fill or concrete,

(b) the excavation has been trimmed and, where necessary, consolidated and prepared in an effective manner, and

(c) the concrete foundation or support for the tank is adequate to secure the stability of and withstand without undue settlement the load or weight of the filled tank or any additional load or weight likely to affect the foundation.

(2) Without prejudice to paragraph (1) of this Regulation, an underground tank or a pipeline connected to such a tank shall not be covered over or encased without the written approval of the licensing authority and, to facilitate compliance with these requirements, not less than three working days' notice in writing shall be given by the person concerned to the authority.

39. (1) A pipeline connected to or to be connected to an underground storage tank shall not be covered over or encased or surrounded by concrete or otherwise unless subjected to an hydraulic pressure test of not less than 0.70 bar, which shall be maintained during such period of time as is necessary to enable a thorough examination to be made of the pipeline for leakage or seepage.

(2) Due precautions shall be taken to ensure that, before an underground storage tank or separate compartment of such a tank is pressure-tested, it is thoroughly cleaned internally of all dirt and loose matter.

(3) After an underground storage tank has been lowered into its excavation and before it is surrounded or encased in concrete it (and separate compartment) shall be subjected to an hydraulic pressure test measured at the top of the tank or compartment at 0.70 bar, which shall be maintained during such period of time as is necessary to enable a thorough examination to be made of the tank for leakage, seepage or undue distortion.

(4) An underground storage tank or separate compartment of such a tank shall—

(a) withstand the appropriate test-pressure required to be carried out under paragraphs (1) and (3) of this Regulation without undue distortion, leakage or seepage,

(b) in the case of a compartmented tank, be pressure-tested in respect of each compartment separately, with any adjacent compartment empty and at atmospheric pressure.

(5) An underground storage tank or separate compartment or pipeline connected thereto shall, following the carrying out of any repairs to remedy defects found during a pressure test, be re-tested in accordance with paragraph (1) and (3) of this Regulation.

(6) A pressure test and examination under paragraph (1) and (3) of this Regulation shall be carried out by a competent person and be witnessed on behalf of and carried out to the satisfaction of the licensing

authority, and a report (in a form approved by the licensing authority) of the pressure test and examination shall be retained by the licensee and kept available for inspection until such time as the tank or pipeline is permanently taken out of service.

40. The filling-in or re-filling of an excavation containing a pipeline or underground storage tank shall be carried out with suitable materials, which shall be consolidated in an effective manner and with due precautions being taken so as to prevent damage by corrosive action or otherwise to the pipeline or tank.

41. (1) The ground above the surface of every underground storage tank and underground pipeline connected to such a tank shall be adequately reinforced to an appropriate extent in depth and surface area so as to prevent a risk of damage or injury to the tank or pipeline from the weight of any vehicle, carriage or article used or likely to be conveyed, handled or deposited in the immediate vicinity.

(2) Subject to paragraph (1) of this Regulation and to any condition attached to a licence—

(a) the manhole lid of every underground storage tank shall be not less than 0.5 metres below ground level,

(b) the shell of every underground storage tank shall not be less than 0.6 metres below ground level, and

(c) where the tank is located in an area likely to be subjected to vehicular traffic, the area above the tank shall be provided with a layer, not less than 250 millimetres in thickness, of adequately reinforced concrete—

(i) set on a properly tamped foundation of suitable non-corrosive materials, and

(ii) extending for an adequate distance in all directions beyond the extremities of the tank.

42. (1) Petroleum Class I shall not be delivered into a fuel tank of a vehicle from an underground storage tank other than by means of an efficient and suitable dispensing pump—

(a) approved by the licensing authority,

(b) driven by electrical power,

(c) designated and marked in accordance with the plan annexed to the licence, and

(d) located and properly installed on a suitably constructed concrete platform or base of adequate surface area—

(i) not less than 120 millimetres above the surface of the adjoining ground level or on which a vehicle is stationary during the delivery of petroleum to its fuel tank, and

(ii) not containing any cavity beneath the pump, unless permitted in a condition as may be attached to a licence, capable of collecting or retaining any petroleum Class I.

(2) Notwithstanding paragraph (1) (b) of this Regulation a suitable manually driven pump may be used in the event of failure of the electricity power supply system or similar emergency.

(3) Every pump required by paragraph (1) of this Regulation shall be provided with an adequate limiting device or pre-set device capable of preventing a continuous outflow in any one operation of petroleum Class I exceeding 100 litres at a retail store or 150 litres at a private store.

(4) A cabinet, housing or enclosure surrounding or enclosing a dispensing pump required by paragraph (1) of this Regulation shall be provided with suitable openings to ensure adequate ventilation to atmosphere of the cabinet, housing or enclosure.

(5) Every sight glass unit provided for observing the flow of petroleum on a pump required by paragraph (1) of this Regulation shall be capable of withstanding a hydro-static pressure of not less than 5 bar.

(6) The maximum by-pass valve pressure of a dispensing pump required by paragraph (1) of this Regulation shall not exceed 2 bar.

(7) A dispensing pump capable of being worked without the aid of electrical power shall not be used unless approved by the licensing authority.

(8) A hose used for the delivery of petroleum Class I from a dispensing pump to the fuel tank of a vehicle shall—

(a) be made of suitable material and of adequate strength to safely withstand any pressure or stress to which it is likely to be subjected in normal use, and any material used for the hose linings shall be impervious to and compatible with petroleum Class I,

(b) be free on both the inside and outside surfaces of dirt or contaminants likely to cause danger,

(c) be examined at regular intervals by an authorised person for any defects,

(d) not be used if it shows signs of material deterioration or weakness, or other defects likely to cause danger,

(e) be, (together with its connections or attachments) constantly maintained in an efficient state to prevent leakage or seepage of petroleum,

(f) not exceed 4 metres in length.

(9) Petroleum Class I shall not be delivered to the fuel tank of a vehicle across or above a pedestrian footway by a dispensing pump—

(a) unless the pump is provided with a suitable and efficient swing-arm device so located and arranged that when not in use it does not project over any part of the footway or remain in a position where it would be exposed to risk of damage or likely to cause obstruction, and

(b) unless the delivery hose is fully extended.

(10) Petroleum Class I shall not be delivered across or above a pedestrian footway at a retail store to the fuel tank of a vehicle by a dispensing pump erected or installed after the commencement of these Regulations.

(11) Except when the store is open for the purpose of dispensing petroleum Class I, the licensee of a retail store or private store shall take all practical steps to ensure that every petroleum Class I dispensing pump shall be maintained de-activated by means of an effective and suitable isolating device so installed or located as to be inaccessible to an unauthorised person.

(12) Subject to any condition attached to a licence, the licensee of a retail store or private store shall provide in a safe and convenient accessible location not, so far as practicable, accessible to persons not employed at the store a suitable master-switch capable in the event of an emergency of de-activating or cutting-off the electronic power-supply to all dispensing pumps at the store.

(13) Where a remote and submerged (or a remote or submerged) pumping system is provided in connection with an underground storage tank, there shall be installed, where so specified in writing by the licensing authority,—

(a) an efficient solenoid or similar control valve or device properly maintained which is capable of—

(i) permitting the pumping control system to operate only when a dispensing nozzle is removed from its hanging bracket (or its normal hanging position) when not in use and the switch on the dispensing unit is manually activated, and

(ii) instantly stopping the pumping system when all nozzles have been returned either to the hanging brackets or to their normal hanging positions,

(b) in the supply pipeline at the base of each individual type dispenser or at the inlet of each overhead dispensing unit, an emergency shut-off valve incorporating a fusible link or other thermally actuated device designed to close automatically in the event of severe impact or fire exposure, and

(c) an insulating valve to enable each individual dispensing unit to be disconnected from the pressure pipeline system,

and where a coupling incorporating a slip joint device is used to join the emergency shut-off valve to the dispenser piping, the emergency valve shall automatically close before the slip joint can disengage and the automatic closing of the emergency shut-off valve shall be checked to ensure its efficient

operation at the time of initial installation and shall be checked at least once a year thereafter by manually tripping the hold-open linkage.

43. (1) A stop, catch or similar device shall not be provided on a pump hose nozzle of a petroleum Class I dispensing pump which is designed to keep the nozzle valve open to permit delivery of petroleum without manual pressure unless—

- (a) the pump is operated at all times by an authorised person.
- (b) the nozzle is provided with a suitable and efficient automatic shut-off device to prevent spillage which may result from a splash-back occurrence or obstruction in or overfilling of a fuel tank of a vehicle or container, and the minimum flow-rate to operate the shut-off device does not exceed one-half of the flow-rate for which the retaining latch is set,
- (c) in the event of the nozzle falling out of the filling-pipe of a vehicle, the operating lever of the nozzle valve is automatically released from the retaining latch or device upon contact of the nozzle with the vehicle or the ground,
- (d) the flow of petroleum is stopped immediately in the event of the nozzle falling out of the filling-pipe of a vehicle, and
- (e) suitable means are provided to prevent so far as is practicable the displacement or detachment (other than by manual movement) of the nozzle in or from the filling-pipe of a vehicle during the delivery of petroleum to the fuel tank.

(2) The pump hose nozzle of a dispensing pump shall be so designed that, in the event of a delivery hose or its connection being subjected to excessive tension or strain because of the movement of the vehicle beyond the normal reach of the hose while the nozzle remains in the filling-pipe of the vehicle, the flow of petroleum will stop and the nozzle will be released from the delivery assembly in order to prevent damage to the control valve, coupling, delivery hose or pump.

44. Subject to any conditions attached to a licence, every hose through which petroleum Class I is dispensed by a self-service pump to the fuel tank of a vehicle shall be equipped with a nozzle so designed, constructed or arranged that—

- (a) no stop or catch on the nozzle is capable of keeping the nozzle valve open to permit delivery of petroleum and to eliminate manual control,
- (b) the nozzle valve cannot be kept open to permit delivery of petroleum other than by manual pressure and closes automatically to prevent delivery of petroleum immediately manual pressure is released,
- (c) it is provided with an effective automatic shut-off device to prevent spillage caused by splash-back or obstruction in or overfilling of the fuel tank of a vehicle or container,
- (d) the maximum flow-rate to operate the automatic shut-off device to prevent delivery of petroleum shall not exceed 45 litres per minute,
- (e) after the shut-off device of the nozzle has been activated, it is not possible to re-commence delivery to the fuel tank without first returning the nozzle control lever to the "off" position.

45. (1) Where the dispensing of petroleum Class I is carried on at a retail store the following provisions shall apply:

- (a) the dispensing of petroleum shall be constantly supervised and controlled by—
 - (i) one or more authorised persons situated in a central position and not less than 17 years of age, or
 - (ii) one or more authorised persons situated in the forecourt area where the delivery of petroleum is being made to the fuel tanks of vehicles;
- (b) where the supervision and control of dispensing pumps are being exercised from a central location, there shall be provided at that location an efficient isolating switch or other device for

cutting-off the power to all pumps and electric lighting circuits of pumps, and the isolating switch or other device shall be in addition to the separate control switch required to be provided by these Regulations for each pump;

(c) where a central control location is provided, all self-service pumps and the forecourt area used for the delivery of petroleum to the fuel tanks of vehicles shall be clearly and readily visible by the authorised person from that location;

(d) where supervision is being exercised by an authorised person from a central location, petroleum shall not be dispensed from a self-service pump unless an authorised person is present in that central location, but this requirement shall not apply if the control system for each pump has been de-activated to prevent delivery of petroleum other than by a separate control system for a pump attended by an authorised person in the forecourt area;

(e) where the supervision and control of dispensing pumps are exercised by an authorised person from a central location—

(i) a system of communication shall be provided to enable that person to issue instructions to customers without leaving his location, and

(ii) the number of dispensing pumps under his supervision and control shall not interfere with the efficient carrying out of his duties in relation to the prevention of risk of injury to person or property;

(f) an authorised person referred to in paragraph (a) of this Regulation shall, so far as it reasonably practicable, ensure, before a pump under his supervision is activated for the delivery of petroleum to the fuel tank of a vehicle, that the engine is switched off and that the appropriate provisions of these Regulations are observed;

(g) subject to any condition attached to a licence sufficient and suitable lighting shall be provided in the area of the forecourt where a dispensing pump is located, and a general level of illumination shall be maintained of not less than 10 lumens per 0.10 square metres, the intensity of illumination to be measured in the horizontal plane at the top of the cabinet, housing or enclosure of each dispensing pump available for use;

(h) in the event of spillage or leakage of petroleum likely to cause a fire, explosion or other dangerous occurrence, the authorised person shall immediately de-activate all dispensing pumps and take all other practicable steps in accordance with his duties under these Regulations for the protection of persons or property against risk of injury.

(2) Where an authorised person is not present at a retail store no petroleum Class I shall be dispensed into the fuel tanks of vehicles owned by the public unless in accordance with and subject to the conditions attached to a licence.

46. (1) There shall be provided by the licensee at every retail store or private store, conveniently placed in an easily accessible location and constantly maintained in good order and readily available for immediate use, adequate and suitable means for extinguishing and fighting fire.

(2) Without prejudice to the generality of paragraph (1) of this Regulation and subject to any conditions attached to a licence, there shall be provided by the licensee for extinguishing or fighting fire at a retail store or private store in easily accessible locations and ready for immediate use—

(a) two suitable foam extinguishers, each of a capacity of not less than nine litres, or

(b) two suitable dry powder extinguishers, each of a capacity of not less than 9 kilogrammes, or

(c) two other suitable fire extinguishers each of adequate capacity.

(3) Where the number of petroleum dispensing pumps at a retail store exceeds five but is less than nine there shall be provided by the licensee not less than one additional extinguisher and, for every three additional dispensing pumps, one additional extinguisher.

(4) Every extinguisher required by this Regulation shall—

(a) be examined by a competent person at least once in every year,

(b) have a tag or label affixed which remains legible for at least 12 months to indicate clearly—

(i) the date of the examination under subparagraph (a) of this paragraph,

(ii) the identification of any re-charging material used, and

(iii) the initials or other mark of the person who carried out the examination.

(5) Every authorised person shall be—

(a) properly instructed as to the precautions to be observed in the prevention of fire, and

(b) suitably trained in the proper use of fire-fighting equipment required by paragraphs (1) and (2) of this Regulation.

(6) (a) Adequate and unobstructed means of escape from all parts of a retail store or private store in the event of fire shall be provided and maintained.

(b) For the purposes of paragraph (6) of this Regulation, where five or more persons are employed at any one time at a retail store or private store, a licensee shall have in force a certificate issued by the appropriate licensing authority certifying that the retail store or private store is provided with such means of escape.

(7) A licensee of a retail store or private store shall affix in a prominent place a notice, which shall be kept up-to-date, containing the telephone numbers to be used in an emergency for obtaining the services of the fire brigade authority, and ambulance and a medical practitioner.

47. (1) A licensee shall not carry out, or permit or cause to be carried out, repairs other than necessary maintenance of manhole lids, their fittings or connections by a competent person to any underground storage tank at a retail store or private store which contains or has contained petroleum Class I without the written permission of the licensing authority.

(2) All practicable steps shall be taken to ensure that a person shall not, nor be required to, repair or alter or attempt to repair or alter at a retail store or a private store an underground storage tank or container that contains or has contained petroleum Class I if the repair or alteration involves welding, cutting, boring, soldering, the use of steel hammers or work likely to cause risk of explosion or fire, unless—

(a) the tank or container has been emptied of all traces of petroleum Class I and adequate steps have been taken to remove in a safe and suitable manner any flammable or explosive gas or vapour or residue which may give rise to such gas or vapour, or

(b) such other equally effective measures have been taken as will adequately prevent risk of ignition, fire or explosion.

48. (1) Without prejudice to the requirement of Regulation 31 (2) (d) of these Regulations, a licensee or employer shall not permit, cause or require a person to enter or remain in a confined space of an underground storage tank that contains or has contained petroleum Class I at a retail store or private store unless—

(a) the confined space is provided with a suitable manhole that affords safe means of ingress to and egress from the confined space,

(b) all practicable steps have been taken to prevent the ingress of liquid, gas or vapour to the confined space,

(c) the confined space is so ventilated, or the means of supply of air to the wearer of breathing apparatus is so arranged, as to provide and maintain adequate supply of fresh air, free from impurities for respiration, and

(d) the confined space is adequately and safely lighted.

(2) A licensee or employer shall not permit, cause or require a person to enter or remain in a confined space of an underground storage tank at a retail store or private store that contains petroleum Class I or sludge or residue or vapour of such petroleum unless—

(a) the confined space has been inspected by an authorised person and a written report made by him of the inspection and of any safety precautions or safety procedures necessary in order to prevent risk of injury to the health or safety of the person, and

(b) the person has been—

(i) adequately warned and has full knowledge of the hazards of such entry,

(ii) adequately advised of the safety precautions or safety procedures necessary, and
(iii) adequately instructed and trained in the safe conduct of any operation or work required to be performed by him in the tank.

(3) A report made under paragraph (2) (a) of this Regulation shall be kept by a licensee for a period of not less than 18 months and shall be produced to the licensing authority at its request.

49. Without prejudice to the requirements of Regulations 48 (1) and (2) of these Regulations, a licensee or employer shall not permit, cause or require a person to enter or remain in a confined space of an underground tank—

(a) in the case of a confined space in which there is reasonable cause to apprehend the presence of any dangerous sludge, residue, gas or vapour of petroleum Class I, to such an extent as to involve risk of the person being overcome or affected by the sludge, residue, gas or vapour, or

(b) in the case of a confined space which there is reasonable cause to believe has contained leaded petroleum Class I from which scale had not been, so far as is reasonably practicable, removed from the tank shell or fittings of the tank unless—

(i) the person is wearing a suitable breathing apparatus maintained in a clean and efficient state and adequate for the protection of his health or safety,

(ii) the person is, where the circumstances so require, wearing a safety harness or other suitable safety device securely attached to a life line that is constantly controlled and held outside the tank by another person who is trained at emergency and rescue operations and who is provided with such breathing apparatus or other equipment as may be required to carry out such rescue operation,

(iii) the person is provided with suitable protective clothing, including neck and head covering and suitable hand protection and footwear, and

(iv) the person is in the view of another person during the whole of the time when he is in the confined space.

50. A licensee or employer shall not permit, cause or require a person without suitable breathing apparatus to enter or remain in a confined space of an underground storage tank at a retail store or private store that has contained petroleum Class I unless—

(a) the confined space has been emptied of all traces of petroleum Class I or dangerous residues of such petroleum and adequate steps have been taken to remove and purge in a safe and suitable manner any flammable, explosive, poisonous or asphyxiating gas or vapour in the confined space,

(b) an authorised person has certified in writing the confined space to be safe for entry without breathing apparatus, and

(c) all necessary precautions are taken to ensure that no cleaning, painting, coating or other operation performed by a person after he has entered the confined space causes a risk to his safety or health.

51. A licensee or employer at a retail store or private store shall take all practicable steps to ensure that—

(a) any person employed by him in the cleaning out of an underground storage tank (or compartment of such a tank) which contains or has contained leaded petroleum—

(i) shall be supplied with adequate written information of the precautions to be observed against lead poisoning,

(ii) shall before leaving the licensed store or taking a meal remove any protective clothing or footwear and thoroughly wash his face and hands,

(iii) shall be advised of the advisability of taking a bath or shower at the end of each day's work or shift or when the cleaning-out operation has been completed, and

(iv) shall be provided with an adequate supply of soap and warm water and with a nail brush,

(b) any tools, breathing apparatus, protective gloves or footwear or other personal protective equipment or devices used in connection with a cleaning-out operation referred to in subparagraph (a) of this Regulation are thoroughly cleaned or disinfected at the end of a day's work or shift or on completion of the operation.

52. (1) Every container containing petroleum Class I or any residue of such petroleum shall have prominently printed or marked on the container in legible and indelible characters by means of a suitable brand, or by means of a suitable label securely attached by its entire back surface to the container, the information specified in paragraph (3) of this Regulation.

(2) The dimensions of the brand or label required by this Regulation shall not be less than—

(a) 52 x 74 mm in the case of a container not exceeding 3 litres capacity,

(b) 74 x 105 mm in the case of a container exceeding 3 litres capacity and not exceeding 50 litres capacity, or

(c) 105 x 148 mm in the case of a container exceeding 50 litres capacity and not exceeding 250 litres capacity.

(3) Subject to any condition attached to a licence, the brand or label required by this Regulation shall contain the following information—

(a) the name and address of the manufacturer, distributor or importer,

(b) a danger symbol (covering not less than one-tenth of the surface area of the brand or label and not less than one square centimetre in extent) comprising a black flame on an orange-yellow background and containing the following words, with the appropriate number of litres included (as shown in Schedule 6 to these Regulations) in black letters—

"PETROLEUM-SPIRIT

Highly Inflammable

Capacity — Litres," and

(c) particulars of the nature of the special risks involved in handling, conveyance, storage or use of petroleum Class I, which shall (except in the case of a container which contains no more than 125 millilitres) at least include the following words: "Keep away from heat", "Keep away from sources of ignition or smoking", "Keep container tightly closed".

(4) (a) Every brand, label, danger symbol and particulars required by this Regulation shall be so placed on one or more of the surfaces of the container that it may be read horizontally when the container is placed in a normal position.

(b) The colour and presentation of the label and danger symbol shall be such that the danger symbol stands out clearly from the background.

53. Subject to Regulations 17 and 23 (1) of these Regulations, the following provisions shall apply to a container store or compound:

(a) a container store shall be provided with adequate means of cross-ventilation, including where necessary a suitable ventilation opening or openings located near to but above bund level and at or near the ceiling or roof level, and any such openings shall be maintained free from obstruction;

(b) subject to paragraph (a) of this Regulation, every ventilation opening shall where necessary be suitably screened or shielded and provided with an effective corrosion resistant and flame-arresting device secured to the inside surface of the wall of the container store;

(c) a licensee shall take all practicable steps—

(i) to prevent spillage, leakage, seepage or other escape of petroleum Class I or other petroleum in or from a container store or compound,

(ii) to ensure that petroleum Class I or other petroleum which is spilt, leaks or otherwise escapes from a container, drum or vessel in a container store or compound shall be immediately drained off to a safe place or otherwise treated to make it safe;

(d) a container store or compound shall not be used for the keeping or storage of—

(i) flammable liquids other than petroleum Class I unless the liquids are contained in containers or other leak-proof drums or vessels of adequate strength and construction, or

(ii) containers of petroleum Class I,
unless the containers, drums or vessels are maintained securely closed as to prevent leakage or escape of liquid or vapour therefrom;

(e) no petroleum Class I or other flammable liquid shall be kept in a pail or similar open vessel;

(f) a container store or compound shall not be used for the keeping of empty containers or vessels unless they are securely closed and free from defect;

(g) containers or vessels in a container store or compound shall not be so stored, stacked or placed as to cause danger and the means of ingress to and egress from a container store or compound is adequate and kept clear of obstruction;

(h) container or vessels of corresponding classes or grades of petroleum or flammable liquids where stored together in a container store or compound shall be so arranged that the labels or markings on each container or vessel can be easily read or checked;

(i) a container store or compound shall be—

(i) kept in a clean and orderly state and free from dirt, waste or combustible materials,

(ii) provided, subject to Regulations 23 (2) and 24 of these Regulations, with adequate means of lighting (whether natural or artificial);

(j) containers which contain petroleum Class I or any residue of such petroleum shall where necessary be protected against direct sunlight in a container compound.

54. Subject to any conditions attached to a licence—

(a) every container store or compound shall be provided with adequate and suitable means of escape in case of danger or alarm;

(b) the doors or gates of a container store or compound shall not be capable of being locked on the inside or so fastened as to prevent the immediate egress of any person from the store or compound;

(c) every container store or compound shall be designed, constructed and kept locked so as to prevent, so far as is reasonably practicable, any unauthorised person from gaining access to the store or compound;

(d) the height of the sill enclosure, well, bound or other means of preventing outflow of petroleum Class I from any container store or compound shall not be less than 150 millimetres;

(e) the immediate area surrounding any container store or compound shall be kept clear of combustible materials;

(f) there shall be provided and maintained in an efficient state and ready for immediate use in connection with a container store or compound an adequate number of suitable fire-extinguishers and an adequate supply of clean dry sand, together with suitable appliances for the application of the sand;

(g) a copy of any conditions attached to a licence and applicable to a container store or compound shall be kept posted in a position where they may be easily seen and read;

(h) a container store or compound shall have conspicuously and suitably marked on its exterior the following words—

"PETROLEUM-SPIRIT

HIGHLY FLAMMABLE

SMOKING STRICTLY PROHIBITED

NO NAKED LIGHTS".

55. The licensee of a retail or private store shall cause to be provided and maintained for the use of a person employed by him in the unloading, conveying or dispensing of petroleum Class I—

(a) protective clothing of suitable design and material which shall when necessary be washed or otherwise cleaned and renewed,

(b) adequate and suitable cloakroom facilities consisting of a suitably situated cupboard or at least one hook or peg for each such person (the hooks or pegs to be not less than 0.30 metres apart laterally) for clothing not worn during working hours,

(c) adequate and suitable cloakroom facilities for the storage of protective clothing,

(d) adequate and suitable facilities for washing the hands (including at least one wash-hand basin), facilities for warming water and sufficient soap, clean towel or other suitable means of cleaning and drying the hands, and

(e) a suitably equipped first-aid box or cupboard which shall be clearly marked "First-Aid" and contain first-aid equipment only.

56. (1) There shall be provided in a conspicuous position on each self-service dispensing pump a suitable notice containing clear and legible instructions for the safe operation of the pump.

(2) There shall be provided and constantly maintained in such a position as to be clearly visible and read on each pump island or dispensing pump location a sufficient number of suitable signs reading and comprising the following words in red letters not less than 10 millimetres in height and imposed upon a white background—

"NO SMOKING

SWITCH ENGINE OFF BEFORE REFUELLING".

PART III.

57. This Part of these Regulations applies to—

(a) engines used for the propulsion of vehicles, boats or aircraft,

(b) engines used for the propulsion of lawn mowers, rollers, sweepers or agricultural implements,

(c) stationary engines kept for domestic, commercial or agricultural purposes and used for the generation of power or for any other purpose,

(d) engines used in connection with the construction or maintenance of works forming part of a canal, dock, quay or harbour,

(e) engines used in connection with the making or repair of roads, and

(f) other types of engines approved of.

58. In this part—

"engine petroleum" means petroleum Class I not exceeding 272.758 litres (60 gallons)—

(a) kept for use in engines to which this part applies and owned by the person keeping the petrol, and

(b) none of which is kept for sale;

"storage place" means a room, building or place of any kind, whether indoor or outdoor;

"owned", in relation to a person or body, means holding the legal title to an engine or vehicle to which it is attached or having the use of the engine or vehicle under a contract of purchase, lease, hiring or hire-purchase agreement or rental or otherwise;

"public place" means any street, road or other place to which the public have access with vehicles, whether as of right or by permission or whether subject to or free of charge.

59. A person shall not have in his possession or under his control engine petroleum unless he complies with this Part.

60. Subject to Regulation 62 of these Regulations, engine petroleum shall not be kept by a person unless—

(a) it is contained in a container which complies with the requirements of Regulations 2 and 17 (2) to 17 (5) of these Regulations,

(b) the container is kept in a storage place which complies with the requirements of Regulation 63 of these Regulations, or

(c) the petroleum is contained in an adequately constructed and properly maintained leak-proof fuel tank of an engine, the filling-pipe or opening of which is kept securely closed by a suitable device when not in use.

61. Where a person keeps or uses engine petroleum in a storage place and there is also kept in that storage place any other petroleum, the other petroleum shall also be kept and used in accordance with this Part.

62. A person shall not have in his possession or under his control engine petroleum in or on a mechanically propelled vehicle which is in a public place—

(a) except in the fuel tank of the vehicle,

(b) except in not more than two leak-proof metal containers each of a liquid capacity not exceeding 10 litres and securely stopped to prevent leakage or evaporation of its contents, and

(c) unless adequate precautions by him are taken to prevent leakage, seepage or escape from the fuel tank or the container of the petroleum.

63. A person shall not keep engine petroleum in a storage place—

(a) unless the storage place is in a safe position out of doors or in the open air,

(b) unless the storage place has a direct entrance to the open air and is adequately ventilated to the open air,

(c) where the storage place is part of or is attached to a building used as a dwelling-house or a place where persons assemble—

(i) unless every partition, floor, ceiling or other means of separation between the storage place and the building or place (or the rest of the building or place) is of adequate fire-resistance construction,

(ii) if there is more than one opening (other than in a floor or ceiling) giving access to the building or place from the storage place, unless such an opening does not communicate with any part of the building or place used by the residents or the public, or is fitted with a suitable self-closing door of adequate fire-resistance construction,

(d) located wholly or partly under a staircase or under a means of exit likely to be required as a means of escape in case of fire, unless the storage place is separated from the staircase or means of exit by a suitable partition, floor or other means of separation of adequate fire-resistance construction with no opening in the partition,

(e) if the amount so kept exceeds in quantity 20 litres or is in a container exceeding 10 litres rated capacity unless—

(i) the storage place is detached from and is not part of a dwelling or place where persons assemble,

(ii) the storage place is at least six metres from any other storage place containing flammable substances, building, stack of timber, or from any public place, and

(iii) suitable provision has been made, by excavation or by the erection of a retaining wall or otherwise to prevent the outflow from the storage place in the event of leakage or escape of the petroleum from the container,

(iv) there is kept, in or conveniently adjacent to the storage place, in an efficient state and ready for immediate use, suitable fire-extinguishing apparatus of a type capable of extinguishing burning petroleum or some other effective means for extinguishing burning petroleum.

64. (1) Every container in which petroleum is kept shall be marked and labelled in accordance with the requirements specified in Regulation 52 of these Regulations, but this requirement shall not apply to such a container unless sold or offered for sale or lease after the commencement of these Regulations.

(2) The licensee of a retail store or private store shall not dispense petroleum Class I into a container nor keep petroleum Class I in a container unless the container is conspicuously marked with the words—

"Petroleum—Spirit".

"Highly Inflammable".

65. A person shall not carry out, or permit or cause to be carried out, repairs to any container or fuel tank which to his knowledge contains or has contained engine petroleum unless the container has been thoroughly cleaned, as far as is practicable, by the removal of all petroleum, sludge or residue or flammable vapour of such petroleum, sludge, or residue.

66. A person—

(a) shall not use or expose engine petroleum in the presence of any fire or artificial light which would be liable to ignite the petroleum or vapour arising from it,

(b) shall not bring any fire or artificial light capable of igniting flammable vapour within dangerous proximity of any container containing engine petroleum,

(c) shall take all practical steps to—

(i) prevent unauthorised persons or a person under 15 years of age having access to engine petroleum or to a container which has not been rendered free of all traces of petroleum or vapours of such petroleum, and

(ii) to prevent risk of injury to person or property in the storage, handling or use of engine petroleum,

(d) shall not use engine petroleum in a storage place for any purpose other than as fuel for an engine, except that—

(i) where fire or naked light is not present, a quantity of engine petroleum not exceeding 0.250 litres may be used for cleaning or as a solvent for repair purposes,

(ii) engine petroleum may be used as fuel for a lamp or other apparatus used for the purpose of lighting or heating, if the lamp or apparatus is so constructed and is maintained in such condition as not to be liable to ignite flammable vapour otherwise than as such fuel,

(e) shall not allow any engine petroleum to escape into any sewer or into any inlet or drain connected to a sewer, or into any watercourse, stream, river, canal, lake, sea or inlet of the sea, and

(f) shall dispose of any waste engine petroleum residue or deposit of such waste by burning or otherwise in a safe manner.

67. Notwithstanding any other provision of this Part, a person shall not keep engine petroleum in his possession or under his control—

(a) in a container exceeding 23 litres rated capacity, or

(b) the total quantity of which exceeds 100 litres (other than engine petroleum kept in fuel tanks of engines);

unless notice in writing that engine petroleum is proposed to be so kept has been given to the appropriate licensing authority and is given at least once in every subsequent year.

68. The Road Traffic (Petroleum) Regulations, 1964 (S.I. No. 174 of 1964), are hereby revoked.

DANGEROUS SUBSTANCES (RETAIL AND PRIVATE PETROLEUM STORES)
REGULATIONS, 1979.

SCHEDULE 1.

Regulation 3 (3)

Rules to be Observed at Retail Stores and Private Stores.

1. A person shall not, except with the consent of an authorised person, enter or attempt to enter or gain access to an underground storage tank or container, or to any structure used for the storage of petroleum, or remove petroleum from any such tank, container or structure.

2. A person shall not have in his possession within 3 metres of any dispensing hose or pump any match, lighter, pipe, cigar or cigarette which is lit or other agency, article or substance likely to cause ignition or fire or explosion.

3. A person dispensing petroleum at a pump at a retail store or private store shall—

(a) take all precautions necessary to prevent overflow or spillage of petroleum,

(b) not knowingly over-fill a fuel tank of a vehicle after the automatic nozzle shut-off device is activated,

(c) not use any dispensing pump, hose or associated equipment by which petroleum is being delivered unless Rule 2 of these Rules is being observed.

4. Every person employed at a retail store or private store shall carry out his duties with such care and diligence and in such a manner as to ensure that any act of his will not cause danger in the storage of petroleum.

5. Every person employed in or about or in connection with a retail store or private store shall, if it is within the scope of his duties, take all necessary steps—

(a) to prevent any act being committed which would tend to initiate fire or explosion likely to cause risk of injury to person or property,

(b) report to an authorised person—

(i) anything which he observes to be unusual or considers to be dangerous in the unloading, conveying, dispensing or storage of petroleum, and

(ii) any attempt to obtain unlawful access to petroleum in an underground tank or container, or

(iii) any breach of these Regulations.

6. Every person employed in or about or in connection with a retail store or private store shall—

(a) comply with any direction given to him by an authorised person for the purposes of complying with a requirement of these Regulations, and

(b) himself comply with the requirements of these Regulations relating to the performance of, or refraining from, any act,

(c) not be under the influence of intoxicating liquor or drugs while attending the fuelling of a vehicle with petroleum Class I or engaged in the unloading of petroleum Class I at the store.

DANGEROUS SUBSTANCES (RETAIL AND PRIVATE PETROLEUM STORES)
REGULATIONS, 1979.

SCHEDULE 2.

Regulation 6 (1)

Form of Application for a first licence/an amended licence/a renewal of a licence/a transfer of a licence for a Retail Store or Private Store.

1. Applicant/Licensee:

Name and address/registered office of the company, firm or person:

.....
.....
2. Location of the proposed retail store or private store:

Address

County.....

Place or townland

Ordnance Survey Map reference

3. Name of licensee (if application is for transfer of a licence):

.....

.....

4. Particulars of plans accompanying this application:

.....

.....

5. Maximum quantity of Class or Classes of petroleum stored or to be stored at the retail store/private store:

Class I: litres in container stores

..... litres in underground tanks

..... litres in above-ground tanks

Class II: litres in container stores

..... litres in underground tanks

..... litres in above-ground tanks

Class III: litres in container stores

..... litres in underground tanks

..... litres in above-ground tanks

6. Will the retail store/private store be used exclusively for the storage of petroleum Class I, Class II or Class III? (Indicate "Yes" or "No" and state class).

.....

7. If the answer to Question 6 is "No", give full particulars of the quantity or amount of any other substance to which your application relates:

.....

.....

.....

(For completion by Licensing Authority only)

8. Remarks:

I, , hereby certify that the information supplied above is true to the best of my knowledge and belief.

Signature of applicant

.....

Postal address of applicant

.....

.....

.....

Date of application

.....

DANGEROUS SUBSTANCES (RETAIL AND PRIVATE PETROLEUM STORES)
REGULATIONS, 1979.

SCHEDULE 3.

Regulation 6 (2)

Form of Licence

Register No.

Total quantity authorised

Fee paid

Licence to Keep Petroleum Class I at Retail Store/Private Store

Name of Licensing Authority

.....

Address of Licensing Authority

.....

.....

Licensee's Name

.....

Licensee's Trade or Business

.....

Licensee's Address

.....

Location of proposed petroleum Retail Store/Private Store

.....

.....

The , being the licensing authority under the provisions of the Dangerous Substances Act, 1972 (No. 10 of 1972), hereby grants this licence authorising petroleum Class I (petroleum-spirit) to be kept for the period not exceeding years from the day of , 197 , at the petroleum retail store/private store at the above-named location, subject to the provisions of the said Act and of any orders, regulations and bye-laws made thereunder or continued thereby and in force for the time being, and subject also to the Conditions hereto annexed.

Signed —

Date —

Conditions to be Observed

1.

2.

3.

4.

5.

DANGEROUS SUBSTANCES (RETAIL AND PRIVATE PETROLEUM STORES)
REGULATIONS, 1979.

SCHEDULE 4.

Regulations 20 & 21

Form of Certificate

Address of licensed store

.....

Full name of licensee

.....

Date Time

.....

I, , hereby certify that—

(a) the underground storage tank or separate compartment of that tank identified by number in the first column hereunder has been properly tested and that the quantity of petroleum specified in the second column hereunder can be safely accommodated in that tank or compartment, and

(b) the connecting hose is properly and securely connected to the filling opening of that tank.

First Column Second Column Third Column

Number of underground storage tank or compartment Quantity and grade of petroleum Class I to be delivered Signature

Note: The authorised person in charge of the storage tank identified by number in the first column of this certificate shall enter in the second column of this certificate the quantity, class and grade of petroleum which is to be delivered to that tank (or to a separate compartment of that tank) and shall sign his name in the third column after the hose of the tank of the tank-vehicle has been securely connected to the tank and before any delivery of petroleum into the tank has commenced.

DANGEROUS SUBSTANCES (RETAIL AND PRIVATE PETROLEUM STORES)
REGULATIONS, 1979.

SCHEDULE 5.

Regulation 31 (2)

PART I.

DIMENSIONS AND CAPACITIES OF HORIZONTAL UNDERGROUND STORAGE TANKS
WITH DISHED AND FLANGED ENDS.

Nominal capacity length in millimetres	Approximate inside diameter of tank in millimetres	Approximate external overall length in millimetres
---	--	---

In cubic metres

5.0 1500

7.5 1500 4618

10 2000 3560

15 2000 5210

20 2000 6960

20 2500 6540

25 2500 5540

25 2750 4638

30 2750 5538

35 2750 6388

40 2750 7238

Regulation 31 (2)

PART II.

DISHED AND FLANGED DIVIDING PLATES AND ENDS

DIMENSIONS

Inside diameter of tank in millimetres	Crown radius in millimetres	Knuckle radius in millimetres	Outside depth of end in millimetres
--	-----------------------------	-------------------------------	-------------------------------------

D R r H

1500

2000

2500

2750

2000

2700

3500

3500

50

50

50

50

184

230

270

319

The finished thickness of the dished plate at the knuckle radius shall not be reduced by more than 5 per cent of the specified minimum plate thickness.

DANGEROUS SUBSTANCES (RETAIL AND PRIVATE PETROLEUM STORES)
REGULATIONS, 1979.

Regulation 52 (3) (b)

SCHEDULE 6.

Danger Symbol.

GIVEN under my Official Seal, this 18th day of September, 1979.

GENE FITZGERALD,

Minister for Labour.

EXPLANATORY NOTE.

The purpose of these Regulations is to control more effectively the licensing of "retail stores" (petrol filling stations) and "private stores" for the keeping of petroleum Class 1 (petroleum-spirit) and for the purpose of preventing risk of injury to persons or property in the storage, conveying, loading, unloading and in dispensing operations carried on in connection with the stores.

The expression "retail store" is used in connection with the keeping for sale to the public under a licence of petroleum Class I for use in the propulsion of a vehicle, ship, boat, aircraft or in the running of an engine, of any kind. The expression "private store" is used in connection with the keeping but not for resale, of petroleum Class I for the same purposes as those mentioned in relation to a retail store.

A retail or private store requires to be licensed by the local or harbour authority or where the store is owned by such authority, the Minister for Labour. The applications form for a first licence (or for the first renewal of a licence continued in force under section 8 of the Dangerous Substances Act, 1972) shall be accompanied by the relevant plans, drawings and other prescribed particulars and the appropriate licensing fees as laid down in the Dangerous Substances (Licensing Fees) Regulations, 1979 (S.I. No. 301 of 1979). A licence for either of the stores may be issued to cover a period up to but not exceeding 3 years.

Requirements relate to the design, construction, installation, maintenance and pressure testing of underground storage tanks and associated pipelines and connections for filling, venting, gauging and removal of the contents of storage tanks. A licensee shall not keep petroleum Class I at a retail store or private store other than in a suitable underground storage tank, or in a container in a container store or container compound except when the container is being conveyed, handled, or in use at the store. The manner of keeping "engine petroleum" (petroleum Class I) adjacent to private dwelling houses or such

places is also laid down. Up to 20 litres of petroleum Class I may be carried in a vehicle apart from its fuel tank provided it is contained in metal containers as prescribed.

The Regulations provide that tank-vehicles shall be located in a safe place during unloading operations and that proper drainage and oil interceptors shall be provided to prevent the escape of petroleum Class I into any public drain or other place likely to cause risk of ignition, fire, or explosion or danger to person or property. Requirements are also laid down governing the minimum measures necessary to provide for the safe transfer of petroleum Class I from road tank-vehicles to underground storage tanks and the dispensing of petroleum Class I into the fuel tank of vehicles at the stores. The Regulations also provide for employment of competent persons possessing adequate knowledge, training and ability to perform their duties safely in order to prevent risk of injury to person or property from petroleum Class I.

The precautions to be observed in the cleaning of containers and underground storage tanks previously used for the storage of petroleum Class I are specified and also requirements relating to the entry of persons to confined spaces of such tanks for the purpose of cleaning or repair.

The construction, marking or labelling of containers is also covered by the Regulations and the necessary general precautionary measures to prevent accident, fire or explosion, from petroleum Class I, are dealt with.

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