

1979 314

S.I. No. 314 of 1979.

**DANGEROUS SUBSTANCES (CONVEYANCE OF PETROLEUM BY ROAD)
REGULATIONS, 1979.**

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S.I. No. 314 of 1979.

DANGEROUS SUBSTANCES (CONVEYANCE OF PETROLEUM BY ROAD) REGULATIONS, 1979.

I, GENE FITZGERALD, Minister for Labour, in exercise of the powers conferred on me by sections 22 of the Dangerous Substances Act, 1972 (No. 10 of 1972), hereby make the following Regulations:

PART I Preliminary

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

2. (1) In these Regulations, except where the context otherwise requires,

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

"approved of" means approved of for the time being by the Minister and "approved" shall be construed accordingly;

"articulated vehicle" means the combination of a mechanically propelled vehicle and a drawn vehicle attached by partial superimposition which is so constructed and attached that not less than 20 per cent of the weight of the drawn vehicle is borne by the mechanically propelled vehicle;

"authorised person" means either the owner or any person who is competent to undertake the work which he may be required to do in connection with loading or unloading operations or in connection with the conveyance of petroleum or use of a vehicle and who has been appointed in writing by or on behalf of the owner to be an authorised person for the purposes of these Regulations;

"available for inspection" means available for inspection by an inspector at the registered office of the carrier or any other approved of place;

"carrier" 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, tank-trailer or other vehicle, being in any case a vehicle used for the delivery or conveyance of petroleum to or from a store;

"closed vehicle" means a vehicle having a body capable of being closed;

"compartment" means any separate compartment used for the conveyance of petroleum forming a liquid-tight division of a tank;

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

"composite vehicle" means a tank-vehicle designed for the conveyance of petroleum both in the tank and elsewhere on the vehicle;

"connecting pipeline" means a connecting pipeline or any part, section or fitting of such a pipeline forming the equipment of a vehicle and used for the inter-connection between the tank and the pipeline of a storage tank at a store and includes any solid or flexible steel pipe, hose assembly, hose, connection, joint, valve or fitting used or intended to be used for the transfer or delivery or conveying of petroleum to or from a tank;

"container" means—

(a) a suitable leak-proof metal drum or barrel of adequate strength, constructed in accordance with an approved standard or specification for conveying petroleum which has a capacity not exceeding 250 litres,

(b) a suitable leak-proof metal container of adequate strength, constructed in accordance with an approved standard or specification for conveying petroleum which has a capacity not exceeding 60 litres,

(c) a suitable leak-proof container of metal or other material of adequate strength, constructed in accordance with an approved standard or specification for conveying petroleum which has a capacity not exceeding 30 litres,

(d) a suitable leak-proof container with a secure stopper for conveying petroleum which has a capacity not exceeding 5 litres, or

(e) a suitable glass or earthenware container for conveying petroleum—

(i) the walls of which are not less than 2 millimetres in thickness with any internal stresses relieved and free from any faults likely to impair its designed strength,

(ii) having a capacity not exceeding 2.5 litres and so securely closed as not to allow any loosening of the closure system or the petroleum contained therein to escape by evaporation or otherwise, which is effectively secured and protected by adequate absorbent cushioning material inside an outer protective package of adequate strength and construction which does not totally contain more than 20 litres of petroleum and the said absorbent cushioning material shall be capable of absorbing any petroleum liquid liable to escape from any breakage or leakage of the glass or earthenware container;

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

"conveyance" means the conveyance of petroleum and cognate words shall be construed accordingly;

"demountable tank" means a tank other than a fixed tank, mounted on a tank-vehicle or tank-trailer and used or intended to be used for the conveyance of petroleum;

"distribution store" means a place or premises used or intended to be used for the keeping for sale in whole or in part of—

(a) petroleum Class I not exceeding in storage capacity 5,000 cubic metres, or

(b) subject to subparagraph (a), petroleum Class I or petroleum Class II and petroleum Class III not exceeding an aggregate storage capacity of 7,000 cubic metres but does not include a store used exclusively for the storage of petroleum Class III for sale in whole or in part;

"earthed" means connected to the general mass of earth in such manner as will at all times ensure an immediate discharge of electrical energy without danger;

"emergency warning flashing device" means a device fitted to a motor vehicle which can be operated so as to cause the direction indicators on that vehicle and on any trailer attached thereto, on both sides thereof, to flash simultaneously;

"filling pipe" means a pipe incorporated in a tank designed for filling that tank;

"fire brigade authority" has the meaning assigned to it by the Fire Brigades Act, 1940 (No. 7 of 1940) and "appropriate fire brigade authority" means the fire brigade authority for the sanitary district in which the store is located or the fire brigade authority which gives the services of its fire brigade in relation to fire occurring in the sanitary district or in the portion of the sanitary district in which the store is located;

"fire resistance" means having elements of construction which will withstand if exposed to tests 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 its fire-separating or load bearing functions;

"fixed tank" means a tank which is structurally attached to a vehicle or is an integral part of the frame of the vehicle;

"flame resistant" means that the material so described shall not be readily ignitable and shall not readily propagate flame;

"fuel tank" means a fuel tank of a vehicle for conveying petroleum exclusively for use in the propulsion of that vehicle;

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

"licensed store" means a store for which a licence has been given under the Act authorising for the time being the keeping of petroleum Class I at the store;

"loading or unloading operations" means any operations connected with the loading of petroleum onto a vehicle or the unloading of petroleum from a vehicle and includes dipping a tank or taking samples from a tank at a store and the loading or unloading of any other substance or article which is permitted under these Regulations to be conveyed on a vehicle;

"major distribution store" means a refinery tank-farm or similar place or premises used or intended to be used for the keeping for sale in whole or in part or for trans-shipment of—

(a) petroleum Class I normally exceeding in quantity 5,000 cubic metres, or

(b) subject to subparagraph (a), petroleum Class I or petroleum Class II and petroleum Class III normally exceeding an aggregate storage capacity of 7,000 cubic metres of petroleum but does not include a store used exclusively for the storage or keeping of petroleum Class III for sale in whole or in part;

"multi-load" means a load consisting of petroleum and one or more substances whether or not a dangerous substance;

"open vehicle" means a vehicle the platform of which has no superstructure or is merely provided with side boards and a tailboard;

"owner" means the occupier of a store (which is used or intended to be used for the keeping of petroleum Class II or petroleum Class III) who manages or controls the store;

"petroleum" means petroleum Class I or petroleum Class II;

"petroleum Class I" means petroleum-spirit tested in accordance with the Regulations under section 20 of the Act and includes any substances as may be approved of for conveyance only in an approved of type 1 tank or type 2 tank;

"petroleum Class II" means liquid 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 Class III" means petroleum which when tested in accordance with regulations under section 20 of the Act gives off a flammable vapour at a temperature exceeding 60° Celsius;

"petroleum-spirit" means petroleum as specified in section 20 (1) of the Act;

"pipeline" means a pipeline used or intended to be used at a store for the conveyance of petroleum and to which a connecting pipeline is, or is intended to be, connected;

"private bulk store" means a place or places used or intended to be used for the keeping (other than for sale or resale in whole or in part)—

(a) under a licence petroleum Class I exceeding 13.638 litres (3 gallons) but excluding petroleum Class I kept in conformity with the Dangerous Substances Act (Retail and Private Petroleum Stores) Regulations, 1979 (S.I. No. 311 of 1979);

(b) an aggregate quantity of petroleum Class II or petroleum Class III exceeding in liquid quantity 5 cubic metres but does not include a store used exclusively for the storage of petroleum Class III;

"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 a stationary engine or in connection with the propulsion of a vehicle, ship, vessel, boat or aircraft of any kind;

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

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

"rated capacity" means the volume which a container, a tank, or separate compartment thereof, is designed to hold or carry being not in excess of—

(a) ninety-five per cent of the water capacity of the container, or

(b) ninety seven per cent in the case of the water capacity of the tank or separate compartment thereof;

"risk of injury" means risk of injury either to persons or property from petroleum due to ignition, fire, explosion, spillage, escape or leakage, or to persons from exposure, in the course of conveying or loading or unloading operations, to liquid petroleum or the vapours therefrom;

"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 of any kind;

"road authority" means

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

"service equipment" means the filling, discharging, venting, measuring or other safety instruments of a tank and includes any heating or insulating devices attached to the tank;

"sheeted vehicle" means an open vehicle provided with a sheet of suitable flexible material to protect the load;

"shell" in relation to a tank, means the tank proper (including all openings and closures);

"single load" means a load consisting of petroleum only;

"storage tank" means a tank used or designed to be used for the storage of petroleum but does not include a tank, a fuel tank or any other form of tank used for conveyance of petroleum, and for the purposes of these Regulations, a self-contained compartment in a storage tank shall be deemed to be a storage tank;

"store" means a distribution store, major distribution store, private bulk store, private store or retail store;

"structural equipment" means the reinforcing, fastening, protective or stabilising components external or internal to the shell;

"tank" means a suitable leak-proof tank container, carrying-tank, demountable tank, fixed tank, self-bearing tank, tank or tanks each having a capacity exceeding one cubic metre, constructed and tested in accordance with such standard or specification as may be approved of and used, or intended to be used, for the conveyance of petroleum and which is mounted, fixed or secured on a tank-vehicle or tank-trailer but does not include a fuel tank or container;

"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" means a vehicle which is a composite vehicle, articulated vehicle, tank-trailer, or tank semi-trailer, comprising one or more fixed or demountable tanks;

"trailer" means either a vehicle which is attached to a mechanically propelled vehicle or a vehicle constructed or adapted for the purpose of being drawn by a mechanically propelled vehicle, but does not include a semi-trailer;

"vehicle" includes a tank-vehicle, used or intended to be used for the delivery or conveyance of petroleum to or from a store;

"water capacity" means the capacity of a container, tank or a compartment thereof when it is completely filled with water, as determined by weighing or by volumetric measurement.

(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) These Regulations shall apply to the conveyance of petroleum by vehicle, but shall not apply to—

- (a) a vehicle which complies with the provisions of paragraph (4) of this Regulation,
- (b) the conveying of petroleum in the fuel tank of a vehicle,
- (c) a vehicle (except a tank-vehicle or tank-trailer) used for the conveyance of petroleum if—
 - (i) the total quantity of petroleum being conveyed in a single load on the vehicle does not exceed 500 litres and the petroleum is contained in a container or containers,
 - (ii) the total quantity of petroleum conveyed in a multi-load does not exceed 50 litres and the petroleum is contained in a container or containers,
 - (iii) the petroleum being conveyed is contained in containers none of which has a capacity exceeding 1 litre;

provided that the appropriate requirements of Regulation 20 of these Regulations are complied with and that a container or where applicable an outer package is marked and labelled in accordance with Regulation 29 of these Regulations or alternatively in such manner as may be approved of; and

- (d) any container or tank which is free, or has been rendered free, and is maintained free, of all traces of petroleum or vapours thereof.

(2) These Regulations are in addition to and not in substitution for the Road Traffic Act, 1961 (No. 24 of 1961), Road Traffic Act, 1968 (No. 25 of 1968), Local Government (Roads and Motorways) Act, 1974 (No. 6 of 1974), Local Government (Planning and Development) Act, 1963 (No. 28 of 1963) or of any statutory instrument made thereunder and for the time being in force other than the Road Traffic (Petroleum) Regulations, 1964 (S.I. No. 174 of 1964) which are hereby revoked.

(3) These Regulations shall not apply to—

- (a) a vehicle conveying petroleum brought temporarily into the State provided that:
 - (i) the petroleum conveyed in the vehicle whether or not a multi-load or single load is packed or labelled in accordance with the requirements contained in Annex A to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) signed in Geneva on the 30th Day of September, 1957, as amended or extended whether before or after the commencement of these Regulations;
 - (ii) the vehicle complies in every respect with the requirements relating to the construction, equipment and operation of the vehicle including containers or tanks as specified in Annex B to that Agreement;
 - (iii) the vehicle is certified pursuant to that Agreement as complying with it;
- (b) a container or tank engaged in an international transport operation within the meaning of the International Convention for the Conveyance of Goods by Rail (CIM) and conforms in every respect with Articles 1 and 2 of that Convention.

(4) Where the Minister is of the opinion that, owing to the nature of the conveyance, or of the loading or unloading operations, or by reason of any special arrangements, the provisions of any of these Regulations are not necessary for the protection of persons or property against risk of injury, he may, by certificate in writing (which he may in his discretion revoke), suspend, for the time being, any such provision subject to such conditions as may be specified in the certificate.

PART II Appointment, Training, Instruction, Medical Examinations, Conduct of Persons Employed, etc.

4. (1) A carrier shall ensure that—

- (a) every person employed by him in connection with the conveyance of petroleum or with loading or unloading operations is appointed in writing by an authorised person,
- (b) a person is not appointed pursuant to subparagraph (a) of this paragraph unless—
 - (i) he has received the training and instruction required pursuant to Regulation 5 of these Regulations,
 - (ii) he is competent to carry out whatever duties or work as may, from time to time, be assigned to him in respect of the conveyance of petroleum or the loading or unloading operations,
 but this requirement shall not apply in relation to a person who is undergoing training if he is working under the immediate supervision of a person duly appointed by an authorised person pursuant to subparagraph (a) of this paragraph.

(2) Every authorised person shall make himself acquainted with these Regulations and any other Regulations made under the Act and for the time being in force concerning the conveyance of petroleum or concerning loading or unloading operations.

5. (1) A carrier shall ensure that no person is employed by him in or about or in connection with the conveyance of petroleum or with loading or unloading operations unless he has received, and where necessary continues to receive, adequate training and instruction by a competent person before and during his employment in all precautions to be taken under these Regulations for—

- (a) his protection against risk of injury,
- (b) the protection against risk of injury or damage to any other person or property likely to be affected.

(2) Whenever a person receives the training and instruction required pursuant to paragraph (1) of this Regulation, such training and instruction shall be followed by adequate and competent supervision to ensure that all necessary safety precautions are being observed to prevent risk of injury to him or to any other person or to property because of his presence.

(3) The training required under paragraph (1) of this Regulation in relation to a person appointed pursuant to Regulation 4 of these Regulations shall include precise, accurate and appropriate instructions, both oral and in writing, for the safe conduct and performance of work at which he is to be employed and in particular shall relate to—

- (a) the manner and importance of observing the requirements, as regards the conduct of persons engaged in the conveyance of petroleum or in the loading or unloading operations specified in the Schedule to these Regulations,
- (b) the nature of the risks presented by the presence of petroleum in the conveying, or in loading or unloading operations,
- (c) the necessary safety precautionary measures and systems of work to be observed by persons to prevent risk of injury whilst engaged in the conveyance of petroleum or in loading or unloading operations,
- (d) the steps to be taken in the event of any spillage, leakage or escape of petroleum during the conveyance of petroleum or during loading or unloading operations,
- (e) the steps to be taken in the event of any breakage, bursting or deterioration of any package, container or tank or of any failure or defect in the vehicle or in the system of conveyance,
- (f) the steps to be taken in the event of fire, ignition or explosion, or of such accident or emergency situations, including the procedures for operating the fire alarm (if any), for contacting the fire brigade authority, Garda Síochána or other person in accordance with such instructions of or by means specified in writing by the owner,
- (g) the efficient use of fire-fighting equipment or appliances provided pursuant to Regulation 26 of these Regulations, the proper extinguishing agents for use therewith, and the extinguishing agents which may not be used,
- (h) the function and proper use of personal protective clothing or other personal protective devices provided pursuant to Regulations 10 and 21 of these Regulations,
- (i) the steps to be taken and the treatment to be given in the event of any person or his protective clothing being affected by contact with petroleum to such an extent as is likely to cause risk of bodily injury,
- (j) the carrying out of elementary first-aid procedures.

(4) Without prejudice to the requirements of paragraphs (1), (2) and (3) of this Regulation, the training and instruction given to every person employed in the conveyance of petroleum or in loading or unloading operations shall (as regards the requisite knowledge and the standard of behaviour) be adequate to ensure the safe performance of work at which a person is employed and for the prevention of accidents.

(5) Without prejudice to the requirements of Regulation 29 of these Regulations, a carrier shall ensure that the driver of a vehicle conveying petroleum is supplied by the manufacturer, consignor or by the

carrier himself, whichever may be appropriate, with the relevant instructions worded (in such a manner as to be clearly understood by the driver and the driver's assistant (if any) at least in the Irish language, the English language or in both those languages, and printed on durable material specifying concisely, in an abridged form where necessary and in clear characters so as to be easily read the essential matters specified in paragraphs (3) (b), (3) (c), (3) (d), (3) (e), (3) (f), (3) (g) and (3) (i), respectively, of this Regulation and the instructions in book form shall be carried by the driver or be kept in a suitable enclosed pocket or place of adequate fire-resistance construction and which is located either within or outside the driver's cab in such a position that the driver has, at all times, ready access to the instructions.

(6) For the purposes of paragraph (3) of this Regulation "in writing" means in the form of a manual of up-to-date written instructions which shall be issued to and safely retained by the person during and after the completion of his training and a copy of which shall be kept readily available for inspection by the carrier.

6. (1) The carrier shall ensure that a person possessing adequate knowledge, training and practical experience in the conveyance of petroleum and in loading or unloading operations shall be appointed in writing by him to exercise competent supervision and to ensure compliance with the relevant requirements of these Regulations and to enforce their observance.

(2) A person appointed pursuant to paragraph (1) of this Regulation,

(a) shall not be required to carry out any other duties, if to do so would prevent or unnecessarily delay the carrying out of any duty or work necessary to prevent the risk of injury,

(b) may order the immediate cessation of any operation or work which, in his opinion, is in breach of these Regulations or is, in any means otherwise dangerous.

(3) A person appointed pursuant to paragraph (1) of this Regulation shall—

(a) ensure, as far as is practicable, before conveying any petroleum in a connecting pipeline that it is, where necessary, inspected and is in satisfactory working condition and may be used for conveying without risk of injury,

(b) ensure that, during the conveying operation, an effective check is maintained on any connecting pipeline used in any conveying operation, and that, if any danger is revealed by such inspection, all practicable steps are taken to remove such danger and, except for the purpose of removing such danger, any person exposed to the danger is withdrawn, and

(c) investigate all occurrences involving the spillage, leakage or escape of petroleum, the breakdown of any connecting pipeline, and any failure to observe the requirements of these Regulations which causes injury to person or property or which may reasonably be regarded as causing a risk of such injury.

(4) (a) A report of every inspection and investigation made pursuant to paragraph (3) of this Regulation shall be made and signed forthwith by the person making the inspection or investigation and the report shall be entered in a book which shall be in such form as may be approved, and which shall be provided by the carrier, and the said book shall be kept readily available for inspection,

(b) A report of any danger revealed in the course of an inspection or investigation or any danger observed by a person appointed under this Regulation in the course of his duty or notified to such person in his official capacity together with the steps taken to remove the danger and prevent any recurrence shall be made in the said book and shall be signed and dated by the person making the entry.

(5) In case where an order is given pursuant to paragraph (2) of this Regulation by a person appointed pursuant to paragraph (1) of this Regulation, the order shall forthwith be complied with.

7. (1) As soon as may be after the commencement of these Regulations, every carrier shall cause arrangements to be made for the medical examination of every person employed as a driver of a tank-vehicle once in every 15 months period of his employment in the case of a person of 55 years or over,

and once in every 3 years period of his employment in the case of a person who has not reached the age of 55 years, and shall cause such examination to be carried out during the last three months of such period.

(2) Every medical examination under paragraph (1) of this Regulation shall, subject to the provisions of paragraph (3) of this Regulation, include medical tests in an approved of form and, in addition, such other medical examination as may be reasonably required by the person carrying out the examination.

(3) If the person who carries out any such examination is satisfied that the person examined is fit for employment to drive a tank-vehicle, he may issue a certificate in an approved of form (hereinafter referred to as a certificate of fitness), in respect of the person and the certificate may impose conditions or limitations in relation to the employment of the person as a driver of a tank-vehicle and may require a person to be further medically examined within such period as may be specified in the certificate.

(4) A certificate of fitness issued pursuant to this Regulation shall be kept readily available for inspection.

(5) A certificate of fitness (other than a certificate which requires a further examination within a specified period) issued pursuant to this Regulation shall have effect for the period of 15 months or 3 years, as the case may be, from the date of issue of the certificate.

(6) Every medical examination under this Regulation shall be carried out by a registered medical practitioner and shall be at the expense of the carrier.

8. (1) Every carrier shall, before the employment of a person as a driver of a tank-vehicle, cause notice to be given—

(a) to the registered medical practitioner by whom that person is to be examined, stating the name, address and age of the person, and

(b) to the person requiring him to attend that registered medical practitioner for examination on a day specified in the notice.

(2) Where a person employed as a driver of a tank-vehicle, is required by a certificate of fitness to be further medically examined, the carrier shall, not later than 7 days before the end of the period specified in the certificate, cause notice to be given—

(a) to the registered medical practitioner by whom the person is to be examined, stating the name, address and age of the person together with particulars of the certificate, and

(b) to the person requiring him to attend that registered medical practitioner for further examination on a day specified in the notice, being a day not later than fourteen days after the end of the period specified in the certificate.

9. (1) A person who fails to submit himself for an initial or further medical examination in accordance with a notice given to him under Regulation 8 of these Regulations shall not be employed as a driver of a tank-vehicle.

(2) The requirements of Regulations 7 and 8 of these Regulations shall apply to every driver of a tank-vehicle whether or not such driver is the carrier if the vehicle is used for the conveyance of petroleum.

(3) Every carrier shall take all necessary steps to ensure that the driver of a tank-vehicle whose ability to perform safely his normal duties as a driver has been impaired by a physical or mental injury or a disease is neither required to, nor permitted to, drive a tank-vehicle which is used for the conveyance of petroleum.

10. A carrier shall cause to be provided and maintained for the use of a person regularly employed by him in loading or unloading operations or in the conveyance of petroleum—

- (a) protective clothing (including footwear, gloves or mitts) of suitable design and material which shall when necessary be washed or otherwise cleaned or 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 shall contain first-aid equipment only.

11. A carrier, having petroleum for the purpose of conveyance, who employs any person in loading or unloading operations or in the conveyance of petroleum shall, whether by furnishing copies of these Regulations or by affixing copies of them in some place where they can be conveniently read, or otherwise, take such measures as may be necessary in order that any person so employed may be fully acquainted with such provisions of these Regulations as may apply to the operation at which he is employed.

12. The provisions contained in the Schedule to these Regulations shall apply as regards the conduct of persons in relation to the conveyance of petroleum or to loading or unloading operations or in relation to a vehicle.

PART III Conveyance, Loading, Unloading, General Requirements.

13. A carrier shall not, without the approval of the Minister, convey or cause to be conveyed to a licensee of a licensed store a consignment of petroleum in a tank unless he has given, or has caused to be given, notice to the licensee stating the grade or grades and quantity of petroleum proposed to be conveyed and the name and address of the proposed consignee and unless he has an intimation, either general or special, of the time at which the licensee is prepared to receive the consignment, and a licensee shall not give such an intimation, nor receive such consignment, unless he is properly prepared and has adequate storage facilities which comply with the provisions of the Act for the safe-keeping of such petroleum.

14. (1) Without prejudice to any other requirement of these Regulations, a carrier shall not permit or require a driver of a vehicle to drive a vehicle which is found either by inspection or by operation, to be in such condition that its operation for the conveyance of petroleum would be likely to cause risk of injury, or would be likely to result in the breakdown of the vehicle, nor shall any carrier or driver drive any vehicle used for the conveyance of petroleum which, by reason of its mechanical condition, or by reason of any apparent defect in any tank or container or system of conveyance, would be likely to cause risk of injury.

(2) Without prejudice to the provisions of Part VII of the Act,

(a) where in the case of any particular class or classes of petroleum conveyed or to be conveyed in any vehicle, tank, container or package, the Minister considers that the relevant requirements of these Regulations are not being observed in such manner as to prevent risk of injury, the Minister may, in any such case, prohibit by notice in writing the conveyance of petroleum in such vehicle, tank, container or package, or

(b) where a carrier is notified by an inspector that a vehicle or tank, or any associated service or structural equipment, requires modification or repair so as to comply with the requirements of these Regulations, the carrier shall ensure that any work specified in writing by the inspector is carried out forthwith, or within such period of time as may be specified in writing by the inspector.

15. (1) A carrier shall take all practicable steps to ensure that—

(a) petroleum is not conveyed in a vehicle the drawing engine of which is fuelled by liquefied petroleum gas,

(b) the fuel tank of a vehicle is not supplied with petroleum Class I direct from a container or tank carried on the vehicle,

(c) where a vehicle conveying petroleum is used to draw a trailer conveying petroleum, the aggregate quantity of petroleum conveyed by the vehicle and trailer together shall not exceed 30,000 litres, unless otherwise approved of,

(d) the capacity of a tank-vehicle shall not exceed in any case 30,000 litres unless otherwise approved of,

(e) the capacity of a tank-trailer shall not exceed 4,600 litres unless otherwise approved of,

(f) the capacity of a tank of more than 5,000 litres capacity shall be divided into self contained compartments no one of which shall exceed 5,000 litres capacity unless otherwise approved of,

(g) a vehicle conveying petroleum does not exceed four metres in height (unless otherwise approved of) nor is loaded in such a manner as to exceed that height and is not driven under a bridge or other obstruction which fails to provide adequate headroom above the vehicle or the load.

(2) In this Regulation, "combination of vehicles" means a mechanically propelled vehicle and another vehicle or vehicles drawn thereby.

16. (1) A carrier or other person, shall not convey, or cause to be conveyed, on a vehicle petroleum in a container or tank which is not of adequate strength and construction or is not securely closed or leaks or is likely to leak or allow or is liable to allow the escape of the contents or otherwise.

(2) Except where a container has been adequately purged or otherwise rendered free of all traces of petroleum (or any residue or vapour of such petroleum), a carrier shall ensure that, where a container is used to convey petroleum, the container is maintained in a leak-proof condition and is securely closed by means of a suitable stopper or other effective closure system in such a manner as not to allow any leakage or escape of petroleum by evaporation or otherwise, except when petroleum is being placed in, or is being transferred from, the container.

(3) A carrier shall ensure that any material constituting a container or tank used by him for the conveyance of petroleum is not liable to suffer deterioration resulting from any reaction (whether chemical or otherwise) with petroleum nor be liable to form harmful or dangerous compounds with such petroleum.

(4) A carrier shall ensure that a stopper or other effective closure system provided on a container in accordance with the requirements of paragraph (2) of this Regulation, is so secured, where necessary, by an additional locking or sealing device that it will not loosen during conveyance, and that it (together with the container as a whole) is capable of safely withstanding the stresses or strains of any handling or pressure likely to be incurred in normal use during conveyance.

(5) A container used by a carrier for the conveyance of petroleum shall not be filled nor caused to be filled by the carrier or other person in excess of its rated capacity.

(6) A carrier shall take all practicable steps to ensure that a package or container of petroleum is not loaded or conveyed in a closed or sheeted vehicle unless the vehicle is clean and free of any foreign matter or contaminant likely to cause ignition, fire or explosion.

(7) A carrier shall take all reasonably practicable steps to ensure that the exposed surfaces of a vehicle, tank, connecting pipeline and any container or package conveyed, or intended to be conveyed,

on the vehicle together with any signs, markings, labelling or danger symbols which are required to be, pursuant to these Regulations, attached to, or on, any external surface of the tank, connecting pipeline, container or package, are reasonably clean and free from and maintained clean and free from any foreign matter or contaminant.

(8) Without prejudice to any other provision of these Regulations, a carrier shall take all practicable steps to ensure that any class or type of any kind of empty tank, container, barrel, vessel or receptacle which has been previously used for the carriage, containment or holding of any dangerous substance is not carried in or on a vehicle unless—

(a) the tank, container, barrel, vessel or receptacle is free from all traces of the substance (or any residue or vapour of such substance), or

(b) in any case where subparagraph (a) of this paragraph is not complied with, the tank, container, barrel, vessel or receptacle is leak-proof and has an effective closure system which is maintained closed and of such a character as to prevent danger.

(9) For the purposes of paragraph (8) of this Regulation:—

"dangerous substance" means a substance which, by reason of being explosive, flammable, toxic, corrosive, oxidizing, reducing, irritant, liable to spontaneous decomposition or combustion, radioactive or otherwise harmful, is liable to cause danger;

"closure system" means a secure closure, or system of closures, designed, constructed, secured and maintained in accordance with sound engineering practice to prevent, as may be appropriate, any excess pressure, leakage of the contents or entry of foreign matter.

17. (1) A carrier who has petroleum for the purpose of conveyance shall not convey the petroleum in a vehicle except—

(a) in a closed vehicle, or

(b) in a sheeted vehicle, or

(c) in a tank-vehicle.

(2) A carrier shall ensure that every sheet of a sheeted vehicle used for conveying petroleum—

(a) is made of flame-proofed impermeable material, and

(b) is tautened so as to cover the vehicle on all sides, with an overlap of not less than 20 millimetres down the sides of the vehicle, and is kept in position by lockable metal bars or chains.

(3) A carrier conveying petroleum in a closed or sheeted vehicle shall ensure that—

(a) in the case of a closed vehicle, the enclosed space of the body work is provided with adequate ventilation, if there is any likelihood of an accumulation of vapours of petroleum being present in the enclosed space due to the absence of such means of ventilation, and

(b) the vehicle displays such signs, identity numbers or lettering as may be approved of for the time being.

(4) A carrier having petroleum for the purpose of conveyance shall ensure that the driver of a vehicle or his assistant is not permitted to open, or to interfere with in any unauthorised or unsafe manner, any package or container of petroleum during the conveyance, loading or unloading of the package or the container.

(5) A carrier shall take all practicable steps to ensure that petroleum is not removed, dispensed or discharged from any container on a vehicle during conveyance, except in an emergency, to avoid risk of injury.

18. A carrier shall take all practicable steps to ensure that—

(a) not more than one trailer is attached at any one time to any tractor or vehicle conveying petroleum,

(b) a tank-trailer is not attached to an articulated tank-vehicle,

(c) a trailer conveying petroleum has not less than 2 axles and 4 wheels (and in the case of a tank trailer 4 dual wheels) and that the distance between the centres of the respective area of contact with the road of the foremost and the rearmost wheels on the same side of the trailer is not less than three-fifths of its overall length,

(d) any tractor or vehicle used to draw a trailer conveying petroleum complies with the requirements of these Regulations,

(e) a trailer conveying,

(i) petroleum Class I is not attached to a vehicle conveying oxidising substances exceeding 250 kilogrammes, or explosives, acetylene, or any substance or article capable of causing ignition, fire or explosion by spontaneous decomposition or combustion,

(ii) oxidising substances exceeding 250 kilogrammes, or explosives, acetylene or any other substance or article capable of causing fire or explosion by spontaneous decomposition, or combustion, is not attached to any vehicle conveying petroleum Class I,

(f) a trailer or semi-trailer is not attached to a vehicle or used for conveying petroleum unless—

(i) the coupling device is of adequate strength and construction to prevent any likelihood of breakage during normal use and so arranged as to adequately prevent the accidental detachment of the trailer from the drawing vehicle or drawing component but is capable of being quickly detached by efficient means from such drawing vehicle or drawing component whenever required.

(ii) the means of connection between the towing vehicle and trailer are so arranged as to cause the trailer to follow substantially in the path of the towing vehicle and to prevent the trailer from swerving from side to side dangerously or unreasonably.

19. (1) A carrier shall ensure that every place or surface of a vehicle where packages or containers of petroleum are to be deposited, placed or stowed is free and kept free of any substance, material or contaminant likely to affect the safety of the load during loading, unloading or conveying.

(2) Without prejudice to the generality of paragraph (1) of this Regulation, a carrier shall ensure—

(a) before packages or containers of petroleum are loaded on a vehicle that all remnants of straw, rags, paper, grit, dirt or other substance, material or contaminant likely to cause risk of ignition, fire or explosion are removed, and

(b) in the event of any spillage of petroleum remaining in the vehicle from a previous load, that the spillage is removed and the surface where it was spilt is thoroughly cleaned.

20. It shall, so far as is reasonably practicable and within his control, be the duty of every carrier having a vehicle used or intended to be used in the conveyance of petroleum, and in loading and unloading operations to ensure that—

(a) all practicable steps are taken and all necessary precautions are observed to prevent risk of injury,

(b) petroleum is not loaded onto or unloaded from, or conveyed by, any vehicle except in conformity with these Regulations,

(c) every package, container or tank containing petroleum is transported, conveyed, handled and placed with all due diligence and with such precautions and in such manner as will adequately prevent any accidental ignition, fire or explosion,

(d) packages or containers containing petroleum are carefully stowed on the vehicle, and, where necessary to prevent risk of injury, are firmly secured in place by appropriate means so as to prevent, during conveyance any displacement or movement thereof in relation to any other package of container being carried on the vehicle or in relation to the adjoining surface of the vehicle,

(e) a tank, container or package is so secured or fastened on the vehicle as to prevent it from becoming dislodged or unstable or falling off or becoming detached from a vehicle during its conveyance,

(f) packets or containers are suitably protected where necessary against friction, impact or contact with any other substance or article conveyed in a vehicle,

(g) nothing is loaded or placed on top of a package containing petroleum or other substance, in a container made of glass, earthenware or similar material unless the package is of adequate strength and construction, and is capable of withstanding the pressure, weight or shock likely to ensue, without risk of damage,

(h) packages or containers containing petroleum of a corresponding grade or grades are where practicable loaded and stowed on the vehicle in such manner that—

(i) they can, where necessary, be unloaded in proper sequence or one by one, as the case may be, without having to re-arrange the remainder of the load,

(ii) the labels or markings on each container or outer package can be easily checked as each container or package is stowed or unloaded,

(i) packages or containers of petroleum are not stowed, stacked or placed as to cause risk of injury and that the means of access to, or egress from, any place where loading or unloading operations is carried on by the owner is suitable and adequate and is kept clear of any obstruction,

(j) packages or containers containing petroleum are not thrown down, handled carelessly or roughly, or dragged along the ground, floor or any other surface in such manner as likely to cause risk of injury,

(k) where the work of loading or unloading operations or the conveyance of petroleum is being carried on,

(i) all due precautions are observed for the prevention of accidents by ignition, fire or explosion, and for preventing unauthorised persons having access to petroleum,

(ii) a person engaged in the work abstains from any act whatever, which is likely to cause fire or explosion and which is not reasonably necessary for the purpose of the loading or unloading operations or the conveyance of the petroleum or of any other article or substance carried therewith and prevents any other person from committing any such act,

(l) petroleum is not spilt and is prevented from escaping into any sewer or drain which is not provided with an oil interceptor,

(m) no fire or artificial light (except an artificial light which is not liable by virtue of its design or position to ignite flammable vapour of petroleum) or any explosive or other substance or article capable of causing fire or explosion is allowed on, or carried on, any vehicle conveying petroleum.

21. (1) A carrier shall ensure that a person is not employed by him in loading or unloading operations in any place in which the atmosphere is likely to cause risk of injury.

(2) A carrier shall not be regarded as having failed to comply with the requirements of paragraph (1) of this Regulation by reason only of physical conditions over which he had no control.

(3) Without prejudice to the generality of paragraph (1) of this Regulation, before a person enters a confined space of a non-gas free tank, or whenever at any time, there is reason to apprehend that the atmosphere in the confined space of a tank or in any working place in a vehicle is likely to be toxic, poisonous, asphyxiating or otherwise harmful, or where, in any such confined space of a tank or at any such place there is risk of ignition, fire or explosion, due precautions shall be taken by the carrier to ensure so far as is practicable, that a person employed by him is not required, or permitted, to enter or to be employed in the confined space of the tank or place unless—

(a) the atmosphere in the confined space of the tank, or at the working place, has been suitably tested or evaluated by efficient and suitable means by or under the immediate supervision of a person authorised in that behalf by the owner, and

(b) the person so authorised, is satisfied that the place is, for the time being, free from risk of injury to persons, and

(c) the person so authorised has issued a certificate of entry (which certificate of entry he is hereby authorised to issue) stating clearly that the person or persons may enter or be employed in the tank or place subject to any maximum limit of time, or to such other conditions (if any) which he considers necessary for the adequate protection of the person or persons against risk of injury.

(4) Regulation 20 (a) of these Regulations shall be construed as requiring, where necessary, adequate and sufficient means for carrying out the tests and evaluations required by paragraph (3) of this Regulation and, as required, such means of accurate and continuous monitoring of the atmosphere in such confined space of the tank wherever this is necessary.

(5) A carrier shall take all practicable steps to secure compliance with this Regulation and shall ensure that a competent person is available when necessary to carry out any tests or evaluations required by this Regulation.

(6) The carrier shall provide such suitable personal protective equipment, whenever such equipment is required or is necessary, as will adequately protect a person employed by him against risk of injury by petroleum.

(7) The carrier shall arrange for all equipment provided pursuant to the provisions of paragraph (6) of this Regulation to be constantly maintained in good order, to be renewed when necessary, and to be kept in a clean hygienic condition, and, when not in use, to be readily available or accessible for immediate use.

(8) For the purposes of this Regulation

"personal protective equipment" includes respiratory breathing apparatus, lifelines and harness, safety spectacles or goggles, face shields, safety helmets or any other means of suitable head protection.

22. In addition to the requirements of Regulation 20 of these Regulations, a carrier shall take, or cause to be taken, all practicable steps, to ensure that—

(a) before petroleum is transferred to a tank or compartment of the tank, the tank or compartment is in a reasonably clean state and free from contaminants or substances likely to be chemically incompatible with the petroleum to be transferred, and

(b) the petroleum is kept free, during the loading, conveyance and unloading operations, from contaminants or substances which are chemically incompatible with it,

(c) during a storm accompanied by lightning, the driver of the vehicle or any person assisting shall not, or be required to—

- (i) gain access to, or remain on, the upper surface or catwalk of the vehicle,
- (ii) transfer petroleum from a tank to a storage tank,
- (iii) carry out manual gauging of a tank,
- (d) before delivering or discharging a petroleum Class I product from a tank at a retail store or private store, not less than two suitable signs are placed in conspicuous locations reading—

"Caution-Keep Clear

Inflammable Liquids Unloading

No Naked Lights

No Smoking",

(e) a tank-vehicle or tank-trailer remains at a safe distance from a loading location until the loading location is ready to accommodate the vehicle or trailer for loading,

(f) a tank is not filled in excess of its rated capacity,

(g) any residue or drippings of petroleum on the external surface of a tank are removed and cleaned-off before the engine of a vehicle drawing the tank is set in motion after a loading or unloading operation,

(h) petroleum is not conveyed on a tank-vehicle or tank-trailer except in the tank but this requirement shall not apply to such conveyance in a composite vehicle,

(i) on completion of the loading operations, the vehicle either is moved from the loading location to a safe designated place at the store or proceeds on its journey.

23. (1) Without prejudice to the requirements of any other statutory instrument for the time being in force under the Act, and subject to any condition attached to a licence by a licensing authority, a carrier shall take all practicable steps to ensure that, during the operation of loading or unloading a tank, the driver of the vehicle or other competent person of not less than 18 years of age (who shall not be in the cabin of a vehicle during transfer) is in charge of—

(a) the tank-vehicle, to ensure that a connecting pipeline 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 or discharging opening of the storage tank or receiving system and to ensure that there is no spillage, leakage, or overflow of petroleum during the transfer,

(b) the tank, to ensure that the transfer of petroleum into a storage tank or partly filled tank is not commenced unless the storage tank or, where appropriate, the tank has immediately before been tested with a dip-stick or other suitable device, and the test has shown that the quantity of petroleum proposed to be transferred can be safely received into the storage tank or tank concerned; provided that this requirement shall not apply to a storage tank having a capacity in excess of 100,000 litres in which case a series of deliveries may be made following a single test, if all of the deliveries are made on a single shift and are supervised by the same person who made the test,

(c) the tank, to ensure, before loading or unloading of the tank is commenced, that the loading or unloading operation can be safely and properly carried out with the equipment provided,

(d) the tank, so as to keep a constant watch on the tank and the connecting pipeline used for the loading or unloading operation,

(e) the vehicle, to ensure before and during the loading or unloading operation and until all the caps, valves or appropriate covers of the tank or storage tank have been closed and securely fastened, that the requirements of paragraph (4) of this Regulation are complied with,

(f) the vehicle, to ensure that it is stationary in the appropriate area as specified by the licensing authority,

(g) the vehicle, to ensure that it, or the trailer on which the tank is mounted is prevented, by the application of the brakes or other such means as may be necessary, from inadvertent movement,

(h) the vehicle, to ensure before any steps are taken to connect a connecting pipeline, or to make any other appropriate connections for transferring petroleum to or from a tank, that the engine of the tank-vehicle is not in motion and is switched off and remains switched-off during the making of the connections to the storage facilities or to the tank,

(i) the vehicle, to ensure, subject to paragraph (2) of this Regulation, that the engine of the vehicle is not re-started or set in motion during loading or unloading of a tank or before all caps or cocks or covers or other closure devices of the tank or the discharging or receiving system have been securely closed or stopped and the connecting pipeline or other appropriate connections concerned between the tank and storage facilities have been properly disconnected following a loading or unloading operation,

(j) the vehicle, to ensure that mechanical or electrical repairs or any other adjustments are not made to the vehicle or trailer on which the tank is mounted during the loading or unloading operation,

(k) the tank, to ensure that in the event of leakage or escape of petroleum in or from any connecting pipeline or connection, the loading or unloading operation is forthwith discontinued.

(2) Where a product pump forming the equipment of a tank-vehicle is driven or powered by the engine of the vehicle and is used only to discharge or unload petroleum Class I from a tank in an emergency the provisions of paragraph (1) (i) of this Regulation shall not apply in relation to, the setting in motion and running of the engine to drive the said pump during the unloading of the tank: provided that the carrier complies with the other provisions of that paragraph, and all practicable steps are taken by him to prevent risk of injury.

(3) A carrier shall, subject to Regulation 44 of these Regulations, ensure that where a tank is loaded through a loading opening in a manhole of the tank, suitable loading arms are provided and the arms or other attachments are so designed and arranged that—

(a) the bottom of the arm can be placed, and is so placed, as to reach the bottom of the tank,

(b) by the use of a suitable protective device, metallic contact between the bottom of the arm and the bottom of the tank is prevented, and

(c) all metallic sections of the arm are safely earthed or bonded in a suitable manner to the fixed installation at the store.

(4) All practicable steps shall be taken or caused to be taken by the carrier to prevent, during loading or unloading operations, any generation, accumulation or discharge of static electricity which would be sufficient to ignite petroleum or vapours thereof or otherwise cause risk of injury.

24. (1) A carrier shall take all practicable steps to ensure that, under normal operating conditions, all tank closure systems are leak-proof and are so designed, secured and maintained as to adequately prevent any loosening of the closure systems except during loading or unloading operations, or as may be necessary in an emergency.

(2) Without prejudice to the generality of paragraph (1) of this Regulation, a carrier shall take all practicable steps to ensure that—

(a) any opening or pipe for loading a tank is at all times kept securely closed and either locked or secured with screw bolts, except—

(i) during the operation of loading the tank, or the taking of samples at a store,

(ii) where necessary during the operation of unloading a tank which is not fitted with suitable venting devices,

(b) the draw-off taps of a tank are at all times kept securely closed and locked, except during the operation of unloading the tank or loading it, if the draw-off point is also used for loading the tank: provided that the said taps need not be locked if they are enclosed in a box which is at all times kept

locked except during the operation of unloading the tank, or loading the tank, if the draw-off point is also used for loading the tank,

(c) the dipping pipe of a tank is at all times kept securely closed except during the operation of loading or unloading the tank or checking the contents of the tank at a store.

(3) For the purposes of this Regulation:—

"loading a tank" means transferring petroleum into the tank;

"unloading a tank" means transferring petroleum out of the tank.

25. (1) A carrier shall take all practicable steps to ensure that petroleum sludge or residue derived from the washing, cleaning or disposal of the contents of a tank or container is not deposited in, nor allowed to enter, any open or closed drain or pipe drainage system unless the drain or pipe drainage system is provided with an effective oil interceptor properly maintained.

(2) A carrier shall take all practicable steps to ensure that any petroleum sludge or residue from a tank or container which is not free from lead or other poisonous substance is disposed of in a manner which will prevent danger.

(3) Without prejudice to the requirements of paragraph (1) and (2) of this Regulation, all practicable steps shall be taken by a carrier 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 tank or container used by him for the conveyance of petroleum.

(4) In this Regulation:—

"oil interceptor" means an interceptor, separator, chamber or other device approved by the licensing authority and designed, constructed and maintained so as to retain for recovery and for safe disposal any petroleum conveyed to it by a drainage system; and

"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.

26. (1) A carrier shall ensure that the vehicle is equipped with—

(a) not less than one portable fire-extinguisher of adequate capacity suitable for fighting a fire (and capable of extinguishing it) in the engine of the vehicle, or in any other part of the vehicle, and such that, if it is used to fight a fire in the load of petroleum being carried, it does not aggravate the fire and if possible, controls it but, if the vehicle is equipped with a fixed fire-extinguisher (automatic or otherwise) easily brought into action for fighting a fire (and capable of extinguishing it) in the engine, then the portable extinguisher need not be suitable for fighting a fire in the engine, and

(b) in addition, not less than one portable fire-extinguisher capable of extinguishing burning petroleum of adequate capacity for fighting a fire in the load of petroleum being carried on the vehicle, and such, that if it is used to fight a fire in the engine, or in any other part of the vehicle, it does not aggravate the fire and, if possible, controls it.

(2) A carrier shall ensure that—

(a) the fire-extinguishing agents contained in the fire-extinguisher with which the vehicle is equipped are such that they are not liable to release toxic or other harmful gases into the driver's cab whether or not under the influence of heat from a fire,

(b) where a trailer or semi-trailer is attached to the vehicle, and the trailer or semi-trailer is conveying petroleum and is stationary, and near to, or at a distance from, the drawing vehicle, the said trailer or semi-trailer is equipped with not less than one fire-extinguisher conforming to the requirements of paragraph (1) (b) of this Regulation,

(c) every fire-extinguisher provided on a vehicle pursuant to paragraph (1) (a) or (2) (b) of this Regulation is—

- (i) maintained in an efficient state and available for immediate use,
- (ii) at all times carried in a safe, secure and easily accessible position,
- (iii) examined by a competent person at appropriate intervals,
- (iv) provided with a suitable tag or label properly fixed to clearly indicate at all times in a legible manner the date of the examination and the identification of any re-charging material or substance together with the initials or other identifiable mark of the person who carried out the examination.

27. Unless otherwise approved of, a carrier shall ensure that a vehicle is equipped with, and carries in such a position as to be readily available for immediate use—

(a) a suitable tool kit, including such tools as are necessary for any emergency repairs which might reasonably be expected to be carried out in the course of a journey,

(b) at least 1 scotch of a size suitable to the laden weight of the vehicle and to the diameter of the wheels,

(c) an apparatus for raising any wheel fitted to the vehicle to a height not less than 150 millimetres from the ground,

(d) a suitable case or box of adequate fire-resistance construction containing such first-aid dressings as may be approved of and appliances of good quality and in good condition.

28. A carrier shall ensure that passengers, other than persons having duties on or in connection with a vehicle are not carried on the vehicle and that not more than three such persons are carried on the vehicle at any time and then only in the driver's cab, if adequate seating accommodation is provided therein.

29. (1) Without prejudice to any other requirement of these Regulations, the conveyance of petroleum in or on a vehicle shall be subject to the carrier complying with any provision as may be approved, relating to—

(a) transport documents for the vehicle or for any container, tank or package being transported or conveyed, or

(b) vehicle signs or markings, or

(c) the labelling, marking, packaging, or maximum weight or rated capacity of any container or tank.

(2) Without prejudice to the generality of paragraph (1) of this Regulation, a carrier shall ensure, so far as is practicable, that every container containing petroleum (or any residue or vapour of such petroleum) which is used by him for the conveyance of petroleum has 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 (4) of this Regulation.

(3) Unless otherwise approved of, the dimensions of the brand or label required by paragraph (2) of this Regulation shall not be less than—

(a) 52x74 mm in the case of a container not exceeding 3 litres capacity,

(b) 74x105 mm in the case of a container exceeding 3 litres capacity, and not exceeding 50 litres capacity, or

(c) 105x148 mm in the case of a container exceeding 50 litres capacity, and not exceeding 250 litres capacity.

(4) Unless otherwise approved of, 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 in black letters—

"PETROLEUM-SPIRIT

Highly Inflammable

Capacity — Litres," and

(c) particulars of the nature of the special risks involved in the handling, conveyance, storage or use of petroleum, 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".

(5) (a) Every brand, label, danger symbol and particulars required by paragraph (4) of 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.

(6) A carrier shall take all practicable steps to ensure that the driver of a vehicle and the driver's assistant (if any) are fully aware of, and understand the meaning of, the brand, label, danger symbol and the particulars required by this Regulation to be on a container or package conveyed in the vehicle.

(7) A carrier shall ensure that, in addition to any document required to be carried on the vehicle pursuant to paragraph (1) of this Regulation, there is carried on the vehicle a document in such form and containing such particulars of the quantity and description of the class or classes of petroleum being conveyed as may be approved.

30. A carrier shall take all reasonable steps to ensure that—

(a) no person drives, steers or conducts a vehicle conveying petroleum in a dangerous or reckless manner or whilst in a state of intoxication or under the influence of drugs,

(b) no person smokes while in, on, or attending or in charge of any vehicle or smokes whilst within 4 metres of any place where loading or unloading operations are being carried on.

31. (1) A carrier shall ensure that a tank-vehicle or tank-trailer, used or intended to be used, on a public road or public place for the conveyance of petroleum is provided with adequate and suitable emergency warning flashing devices, incorporated as an integral part of the direction indicators and of identical design, type and colour, are arranged and fitted in a secure manner to the vehicle and that the devices are used when the vehicle is stationary on a public road or public place due to—

(a) a breakdown of the vehicle,

(b) a road accident, or

(c) any other similar emergency;

provided that the said devices are not to be activated if their use would be likely to cause risk of ignition, fire or explosion.

(2) Unless otherwise approved of and without prejudice to the generality of paragraph (1) of this Regulation, a carrier shall provide on a tank-vehicle used or intended to be used on a public road or public place not less than two suitable portable lighting devices capable of satisfying the requirements of paragraphs (3) (a) and (3) (b) of this Regulation and of producing when activated an adequate amber light of sufficient illumination and of an intermittent flashing or steady type, and the devices shall be—

- (a) independent of the electrical equipment of the vehicle,
- (b) so designed that their use or intended use cannot cause ignition of the petroleum carried on the vehicle.

(3) If a tank-vehicle conveying petroleum during the hours of darkness or poor visibility is stationary on a public road or public place under the circumstances set-out under paragraphs (1) (a), (1) (b) or (1) (c) of this Regulation and its flashing devices are not in efficient working order or otherwise ineffective for warning approaching mechanically propelled vehicles or other traffic of the danger which exists, a portable lighting device of the type specified by paragraph (2) of this Regulation shall be activated and placed by the driver of the vehicle or his assistant on the public road at appropriate points—

- (a) not less than 10 metres ahead of the vehicle,
- (b) not less than 10 metres to the rear of the vehicle, or
- (c) such greater distance to the front or rear of the vehicle as may be necessary to give approaching traffic sufficient warning of the presence of a broken down vehicle on the road.

(4) The driver of a tank-vehicle conveying petroleum shall—

- (a) if the vehicle is stationary on a public road or public place due to a breakdown of a vehicle or road accident or other emergency,
 - (b) if the vehicle is parked under the conditions specified in paragraph (5) (d) (i) of this Regulation,
 - (c) if a tank containing petroleum is not properly secured or a container containing petroleum is not properly stowed or is leaking or otherwise unsafe or dangerous,
- halt the vehicle, so far as is reasonably practicable or expedient, at the nearest place of safety and take all practicable steps to—

- (i) carry out any necessary instructions specified under Regulation 5 (3) of these Regulations,
- (ii) notify, or cause a member of the local Garda Síochána and, where there is fire or risk of fire, the appropriate fire brigade authority, to be notified immediately,
- (iii) prevent, as he may deem necessary or appropriate, any risk of injury.

(5) A driver of a tank-vehicle conveying petroleum shall ensure that the vehicle is not parked—

- (a) otherwise than in a safe location in a private or public vehicle parking area where the vehicle is not likely to suffer damage—

- (i) by malicious action,
 - (ii) impact by other vehicles or from other causes,

- (b) otherwise than in a safe manner with its brakes, scotches or where necessary other effective devices applied or used to prevent any inadvertent movement of the vehicle,
- (c) subject to subparagraph (d) of this paragraph, otherwise than in a safe designated or permitted location at a store licensed under the Act for the keeping of petroleum,

- (d) at any location otherwise than in accordance with subparagraph (c) of this paragraph except under the following conditions, namely:—

- (i) the facilities under subparagraph (c) are not available to the driver of the vehicle due to circumstances beyond his control resulting from a breakdown of the vehicle or a road accident, unsafe road conditions arising from frost or snow, an unsafe tank or container on the vehicle, or any other similar emergency, or

- (ii) the parking location is, for the purpose of preventing ignition, fire or explosion or injury to person or property, in a suitably safe open space separated by an adequate distance from any public road, occupied dwellings, premises or any place where persons are likely to assemble, or

(iii) the parking location (if situated within a built-up area of any city, town or village) is approved for the purpose by the appropriate fire brigade authority in that area.

(6) Every tank-vehicle conveying petroleum shall be constantly and properly attended—

(a) by the driver or his assistant, or

(b) by some other competent person of not less than 18 years of age who has been notified of the nature of the load and the whereabouts of the driver or his assistant, and

a person shall not be regarded as being in proper attendance at the vehicle unless he is within a reasonable distance of the vehicle, has ready access to it, and, where reasonably practicable, is able to keep it under observation; provided that this Regulation shall not apply where it is necessary for the driver to take immediate and appropriate action in an emergency to prevent risk of injury.

(7) A carrier shall ensure (unless permitted under the conditions attached to a licence) that petroleum Class I is not kept in the tank of his vehicle at a store between the hours of sunset and sunrise.

(8) Notwithstanding any other requirement of this Regulation, the carrier or driver of a vehicle conveying petroleum shall ensure, so far as is possible—

(a) that petroleum is not loaded on or unloaded from the vehicle—

(i) in any public road or public place in a built-up area without the special permission of the Garda Síochána,

(ii) in any public road or public place elsewhere than in a built-up area without prior notice thereof having been given to the Garda Síochána

unless the carrying out of the said loading or unloading is permitted under the conditions (if any) attached to a licence for a store or is justified in an emergency for serious reasons of safety,

(b) that halts or stoppages of the vehicle for service requirements are not made near inhabited places or places of resort.

(9) For the purposes of paragraph (1) of this Regulation "arranged" means—

(a) arranged in pairs, one of each pair being fitted—

(i) to the left of the longitudinal axis of the vehicle, and

(ii) another to the right of such axis,

(b) fitted, as near as is practicable, at the same height from the ground level,

(c) fitted, as near as is practicable, equidistant from the longitudinal axis of the vehicle and, as near as is practicable, in the same longitudinal position in relation to the vehicle,

(d) fitted so that no part of the illuminated surface of the emergency flashing device shall exceed 1,828 millimetres (6 feet) or be less than 380 millimetres (16 inches) above ground level.

32. Where a vehicle conveying petroleum on a public road or public place breaks down or is involved in an accident or is otherwise incapable of being used to convey the petroleum and a vehicle complying with the requirements of these Regulations is not available, in an emergency, for the purpose of removing the petroleum to the nearest place of safety, a vehicle which does not comply with the aforesaid requirements, may be used or caused to be used by the carrier for the purposes of such removal.

PART IV Tank Construction, Vehicle Construction, Testing, Certification, Safety Inspection, etc.

33. (1) A carrier shall take all practicable steps to ensure that a tank, including its closure system is leak-proof and is designed, constructed, located, supported, fitted, secured, tested, examined and maintained in accordance with sound engineering practice so as to adequately withstand, in a safe and secure manner the maximum stress, vibration, pressure or thermal effects to which it is likely to be subjected under normal conditions of loading or unloading operations or conveying of its contents by tank-vehicle or tank-trailer.

(2) Without prejudice to the generality of paragraph (1) of this Regulation, a carrier shall take all practicable steps to ensure that—

- (a) the materials of which a tank and its system of closure are made are not chemically incompatible with or liable to react dangerously with, the petroleum carried in the tank so as to cause risk of injury,
- (b) the petroleum carried in the tank is not liable to cause the decomposition of the material of which a tank or its system of closure is made,
- (c) a tank is, where necessary, adequately protected at all times on external surfaces against corrosion or other harmful atmospheric contaminations or influences,
- (d) a tank is made, unless otherwise approved, of metal of adequate strength provided that non-metallic liners to a tank may be used if they are required for the protection of the tank,
- (e) a tank comprises a shell and adequate suitable items of structural and service equipment designed and constructed to facilitate and secure the safe use of the tank without loss of its contents in conveying, loading or unloading operations,
- (f) a tank shell and its structural or service equipment shall be designed to adequately withstand the static and dynamic stresses to which they are likely to be subjected in normal use without any loss or escape of the petroleum product being conveyed,
- (g) the fabrication and welding work in the manufacture of a tank is carried out in accordance with sound engineering practice and any part or section of the welding work is, where considered necessary by a competent person of the appropriate approved of body or inspecting authority concerned, subjected to suitable non-destructive testing, and all such work is certified by a competent person as complying with the provisions of these Regulations,
- (h) appropriate records of the certification made pursuant to subparagraph (g) of this paragraph are kept by the manufacturer of the tank at the premises where it is manufactured during the period of its manufacture and, thereafter, by the carrier for a period of six years following the date of the bringing into use of the tank and the records shall be readily available for inspection by an inspector or by the properly authorised person of the appropriate approved of body or inspecting authority concerned.

34. (1) Subject to Regulation 33 of these Regulations, a carrier, so far as it is practicable, shall ensure—

- (a) that where a tank is provided with a filling pipe or dipping pipe it—
 - (i) is of suitable design, good construction, sound material, properly installed and of adequate strength for the purpose of its use,
 - (ii) terminates at its lower end at a point not exceeding 50 millimetres, or as near as practicable, from the bottom of the interior surface of the tank and is capable of being used without risk of injury,
- (b) that a dipping pipe is either provided with—
 - (i) a suitable pressure equalising opening of adequate size in the wall of the pipe within the tank not exceeding 500 millimetres from the uppermost part of the pipe and vented into the ullage space of the tank and the opening shall be covered, in such manner as to provide an efficient flame trap, with an approved type of corrosive-resistant fine wire gauze or
 - (ii) alternatively so arranged that the dipping pipe is closed by means of a suitable valve and a cap,
- (c) that a filling pipe is closed by means of a suitable valve or a cap,
- (d) that, where a tank is designed to be loaded through a filling opening in a manhole—
 - (i) the cover of the manhole is securely attached or fastened to the tank in such manner as to prevent any loosening during carriage and where eyebolts are used for this purpose there shall be not less than 6 eyebolts which shall be provided with efficient means to ensure that they remain securely tightened during carriage,
 - (ii) between the cover of the manhole and the body of the tank if it is not welded thereto, and between the cap of the filling opening and the said cover, there is provided a gasket of such material and so designed as to effectively prevent the escape of petroleum from such tank.

(2) Notwithstanding any other provisions of these Regulations, a carrier shall take all practicable steps to ensure that any orifice of a pipe or other opening of a tank used for loading or dipping purposes is provided and maintained with adequate and suitable means of closure so as to prevent leakage or seepage of the contents of the tank during conveyance.

(3) A carrier shall ensure that, where work has to be done by a person inside the confined space of a tank, the confined space is (unless there is other adequate means of safe ingress) provided with a

manhole which is rectangular, oval, or circular in shape but which is not less than 406.4 millimetres long, 355.6 millimetres wide or (if circular) not less than 406.4 millimetres in diameter.

35. A carrier shall take all practicable steps to ensure that—

(a) a bottom draw-off pipe or any pipe provided for bottom loading on a tank, is fitted with a secure tap, sealing cap and internal valve of adequate strength and construction suitably located within the tank shell,

(b) a shear section is provided on the pipeline between the internal valve and the draw-off tap or discharge faucet and between the internal valve and the bottom loading tap or faucet and the shear section shall be as close as is practicable to the internal valve,

(c) the aforesaid shear section is so designed, constructed and arranged as to break under excessive stress, strain or impact and to leave the internal valve intact,

(d) a bottom-loading tap where provided, or a draw-off tap is either,

(i) enclosed in a box of adequate strength and construction which is made of hardwood or other suitable material and which is provided with an efficient lock, or

(ii) provided with an efficient lock and, where necessary, adequately protected from damage against projected stones, materials or blows by a strong and suitable steel guard or by the frame of the vehicle,

(e) any pipe used for bottom-loading is where necessary provided with a suitable device to prevent dangerous differences in electrical potential if there is a likelihood of such differences occurring in a tank during loading operations.

36. (1) A carrier shall ensure that a tank is not used for conveyance of petroleum unless—

(a) it withstands the approved minimum test pressure without permanent deformation, leakage or seepage and, in the case of a compartmented tank, each compartment thereof is pressure tested separately with any adjacent compartment empty and at atmospheric pressure, and failure under pressure due to permanent deformation, leakage or seepage of any compartment shall be taken as a failure of the whole tank,

(b) during the period of a pressure test, all closures of the tank are, so far as reasonably practicable, securely fixed in place, together with any operative relief devices which shall be clamped, plugged or otherwise made inoperative in a suitable manner, but any such clamps, plugs or similar devices shall be removed immediately after the completion of the pressure test.

(2) Where air or inert gas is used to carry out a pressure test under paragraph (1) of this Regulation, a carrier shall ensure that the minimum approved pressure is maintained for a sufficient period of time to permit the entire surface of all joints of the tank under pressure to be coated with a solution of soap and water, or heavy oil, or other suitable substance to adequately enable the presence of any leaks to be detected by the person carrying out the test.

(3) Without prejudice to paragraph (2) of this Regulation, each pressure test shall be maintained for such period or periods of time as is necessary to enable a thorough examination to be made of the tank for leakage, seepage or other defect.

(4) A carrier shall ensure that every pressure test made pursuant to paragraph (2) or paragraph (3) of this Regulation is carried out by a competent person of an approved body or inspecting authority and a report of the pressure test and subsequent examination by the competent person in accordance with sound engineering practice shall be signed and dated by him, and every such report shall be retained by the carrier and kept available by him for inspection until such time as the tank has been permanently taken out of service.

(5) A carrier shall ensure that every fault or defect in a tank, or in any part or component thereof, likely to infringe a requirement of these Regulations which is discovered in pursuance of an inspection, test, or examination caused by him to be carried out for the purpose of complying with these Regulations shall be remedied before the tank is used in loading or unloading operations.

(6) A carrier shall, following the carrying out of any work to remedy any fault or defect found during a pressure test, ensure that the tank is retested in accordance with paragraphs (2) and (3) of this Regulation.

37. A carrier shall ensure that—

(a) petroleum is not conveyed in a tank unless the tank is clearly marked in accordance with these Regulations and has been certified by a competent person of an approved inspecting authority as conforming to the requirements of these Regulations,

(b) a certificate signed and dated by a competent person of the approved inspecting authority and issued pursuant to paragraph (a) of this Regulation shall be in such form as may be approved of and a true copy of the certificate shall be kept readily available for inspection for not less than five years from the date of issue of the certificate.

38. (1) A carrier shall ensure that—

(a) the following particulars are prominently printed or marked in legible and indelible characters on the tank, namely,

(i) the name of the carrier,

(ii) the rated capacity in litres of the tank and each compartment (if any) of the tank,

(iii) in the case of a demountable tank, the tare weight of the tank, and the maximum permissible laden weight,

(iv) the approved type of tank, (e.g. type I or type II),

(v) the name of the substance being carried,

(b) the following particulars are permanently engraved in legible characters either on the tank shell itself, if by so doing in a suitable manner the strength of the tank is not diminished or impaired, or on a corrosion-resistant metal plate permanently and effectively affixed to the tank and so located as to be readily accessible for inspection, namely,

(i) the approval number of the tank,

(ii) the name or mark of the manufacturer of the tank,

(iii) the manufacturer's serial number,

(iv) the date of manufacture of the tank,

(v) the water capacity of the tank or each compartment (if any) thereof,

(vi) the test pressure in kilopascals (kPa) (gauge pressure),

(vii) the month and year of the initial test of the tank and of the most recent (if any) test and the stamp of the competent person who carried out the test.

(2) A carrier shall ensure that a tank bears the approved danger symbols.

39. (1) All practicable steps shall be taken by a carrier to ensure that a connecting pipeline used or intended to be used by him or any other person in the loading or unloading of the vehicle—

(a) is of a suitable design, good construction, adequate strength and free from patent defect,

(b) is so connected, located, supported and protected where necessary, examined, tested and maintained so as to prevent, during its use in loading or unloading, any leakage or escape of petroleum therefrom,

(c) is capable of,

(i) safely withstanding the maximum working pressure or stress, and

(ii) safely accommodating any loading, vibration, expansion, contraction or flexure,

to which it is likely to be subjected in normal use,

(d) is of a class, grade or type suitable for the service and operating conditions to which it is likely to be subjected when normally used in the operations,

(e) is not chemically incompatible when in contact with the petroleum product it is used to convey,

(f) is both oil and corrosive resistant,

(g) is, where connected to a pump in loading or unloading operations, safeguarded, where necessary, by suitable automatic means to prevent any pressure being applied in the pipeline in excess of its maximum normal working pressure.

(2) A carrier shall ensure that a connecting pipeline—

(a) is not used for conveying petroleum unless subjected to a hydrostatic pressure test of not less than fifty per cent in excess of its designed working pressure and the pressure test shall be maintained during such periods of time as is necessary to enable a thorough examination to be made of the pipeline for leakage, seepage or other defect,

(b) withstands the appropriate pressure test referred to without leakage, seepage, distortion or elongation.

(3) A carrier shall ensure that every pressure test made pursuant to paragraph (2) or paragraph (5) of this Regulation is carried out by a competent person and that a report of the pressure test and every subsequent examination by such person in accordance with sound engineering practice shall be signed and dated by him, and that every such report shall be retained by the carrier and kept available by him for inspection until such time as the connecting pipeline has been permanently taken out of service.

(4) A carrier shall ensure that every fault or defect in a connecting pipeline or in any part or component thereof likely to infringe a requirement of these Regulations which is discovered in pursuance of an inspection, test, or examination caused by him to be carried out for the purpose of complying with these Regulations shall be remedied before the pipeline is used in loading or unloading operations.

(5) A carrier shall, following the carrying out of any work to remedy any fault or defect found during a pressure test, ensure that the connecting pipeline is retested in accordance with paragraph (2) of this Regulation.

(6) A carrier shall ensure that any connecting pipeline which he is aware is defective is only carried on a tank-vehicle or a tank-trailer for the purpose of disposal or undergoing such repairs as may be necessary to avoid risk of injury.

(7) A carrier shall ensure that a connecting pipeline used or intended to be used in loading or unloading operations satisfies the following requirements, namely,

(a) that before being connected to an inlet or outlet pipe connection of a tank or a storage tank for conveying petroleum it is—

(i) free, so far as practicable, from any accumulation of dirt, grit, oil or other contaminant, and

(ii) free on the face of its connecting couplings or flanges, from corrosion, pitting or other defect likely to affect a vapour tight connection.

(8) A carrier shall ensure that every connecting pipeline is marked in such manner as may be approved of.

(9) Without prejudice to any other requirement of this Regulation, a carrier shall ensure that—

(a) a hose of a connecting pipeline is fully extended and thoroughly examined for any defects, in accordance with sound engineering practice at appropriate intervals by a competent person,

(b) a hose of a connecting pipeline which shows any material deterioration, cracks or signs of leakage or weakness in its wall or at its couplings, or any other defect likely to cause risk of injury, is not used in loading or unloading operations,

(c) a hose of a hose assembly is, where necessary, subjected to a pressure test in accordance with paragraphs (2) and (5) of this Regulation if there is reasonable cause to suspect, at any time, that the hose is not sound.

(10) A carrier shall ensure that a connecting pipeline carried on a tank-vehicle or tank-trailer is secured by efficient and reliable means to the frame of the vehicle or tank so as to effectively prevent dislodgement or loosening of the pipeline during carriage.

(11) Unless otherwise approved of, a carrier shall ensure that a hose assembly of a connecting pipeline does not exceed 18 metres in length.

40. (1) Notwithstanding any other requirement of these Regulations, a carrier shall ensure that a tank-vehicle, or any part or accessory thereof, is not used for the conveyance of petroleum unless it is so designed, constructed, tested where necessary in accordance with sound engineering principles or practices and maintained as to perform safely under the severest conditions likely to be encountered in normal use and to prevent risk of injury.

(2) Without prejudice to the generality of paragraph (1) of this Regulation and any other requirements of these Regulations, a carrier shall ensure that—

(a) the body, chassis, tank and associated fittings of a tank-vehicle are of adequate strength and of fire-resistant materials,

(b) the construction of a tank-vehicle, the means of attachment of a tank to a vehicle and the manner of certification of the tank-vehicle are in accordance with such requirements as may be approved of.

41. Unless otherwise approved of, the carrier shall in the case of a mechanically propelled vehicle used or intended to be used for the conveyance of petroleum to or from or at a store, ensure that:—

(a) without prejudice to Regulation 43 of these Regulations, the engine is so designed, constructed, located, secured and maintained and its exhaust pipe or pipes is or are so constructed, placed, secured, directed and protected as to prevent danger to the load or risk of injury,

(b) the induction or air intake system of the engine is so designed, located or protected as to prevent, as far as is reasonably practicable, any risk of injury,

(c) where the engine is fuelled by petroleum Class I, it is fitted with a filter or other device capable of providing at all times an efficient flame-trap,

(d) the vehicle is provided with efficient means, in an easily accessible and clearly marked location, for cutting-off the fuel supply to the engine and stopping it in an emergency,

(e) the engine of the vehicle is supplied with fuel from a fuel tank which—

(i) is not located or secured directly above the engine or its exhaust pipe,

(ii) is, so far as is reasonably practicable, located, secured, arranged, shielded or separated that, in the event of leakage from the fuel tank or the engine's fuel system, or in the event of the accidental over-filling of the fuel tank, the fuel drains directly on to the ground and cannot impinge on the engine or on any part of the storage battery, ignition or exhaust system,

(iii) is adequately protected, so far as is reasonably practicable, against damage,

(f) the vehicle is provided, in the case of an engine fuelled by petroleum Class I, with an efficient fire isolating valve (incorporating a suitable fusible device) fitted to the fuel feed-pipe system and so located or arranged that the fuel to the engine of the vehicle is automatically cut-off in the event of fire occurring near the valve.

42. Unless otherwise approved of, a carrier shall take all practicable steps to ensure that—

(a) no readily flammable material is used in the construction of a driver's cab of a vehicle,

(b) any window provided in the back of a driver's cab or in the shield or screen referred to in Regulation 43 of these Regulations is of a fire-resistant safety glass and is permanently closed or sealed all round in such manner as to be effectively fire-resistant,

(c) any fuel tank of a vehicle used for carrying any fuel used in the propulsion of the vehicle is leak-proof and that the filling opening of the fuel tank is provided with an efficient cap or closure device made of suitable ferrous material and capable of being effectively locked in the case of a fuel tank containing petroleum Class I and of maintaining at all times a liquid-tight seal on the fuel tank opening so as to adequately prevent any leakage of its contents,

(d) the cap or closure device referred to in paragraph (c) of this Regulation is kept in the case of an engine fuelled by petroleum Class I locked at all times during the use of the vehicle and is only unlocked by an authorised person.

43. Unless otherwise approved of, a carrier using or intending to use a tank-vehicle for conveying petroleum at a licensed store shall ensure that—

(a) the back of the driver's cab is of fire-resistance construction or is protected by a shield or screen of fire-resistance construction,

(b) where the engine of the vehicle extends beyond the rear of the cab, it is effectively shielded or screened from the tank by a shield or screen of fire-resistance construction so designed as to deflect any spillage of petroleum away from the engine and that the tank is separated from the driver's cab or the shield or screen by a space of not less than 150 millimetres.

44. (1) All practicable steps shall be taken by the carrier to ensure that the electrical apparatus of the vehicle is designed, installed, protected, worked and maintained in accordance with sound engineering practice so as to prevent risk of injury.

(2) Unless otherwise approved of, a carrier shall ensure—

(a) that the vehicle is provided with an efficient and adequate electric lighting system the rated voltage of which shall not exceed 24 volts,

(b) that the rated voltage of any circuit of the electrical equipment of the vehicle does not, except for the ignition circuit, exceed 60 volts.

(3) Subject to paragraphs (4), (5) and (6) of this Regulation, a carrier shall ensure that the electrical apparatus of a vehicle is—

(a) in the case of the electrical conductors, of adequate capacity to prevent over-heating and adequately insulated,

(b) in the case of all electrical circuits, adequately protected against any excess current by means of suitable fuses or automatic cut-outs, and wired independently of the chassis, or the chassis may be used as an earth return; provided that electrical continuity is maintained by copper bonding straps or tapes of adequate capacity and strength,

(c) in the case of all electrical wiring, firmly and securely attached in a suitable manner to the vehicle and so located or placed that the conductors are adequately protected from damage against impacts, jolting, projected stones or heat likely to be emitted by the engine and exhaust system.

(4) Unless otherwise approved of, where electrical apparatus is located behind the driver's cab or the fire-resisting shield or screen, a carrier shall ensure that—

(a) it is so designed, located, installed and protected as to be incapable of causing ignition or short-circuiting under normal conditions of use of the vehicle in order to reduce to a minimum the risk of either occurrence in the event of impact or distortion,

(b) it consists (in the case of all electrical conductors) of cables protected by seamless and rustproof casings,

(c) screw-cap bulbs are not used for electric lighting and, where electric lamps are provided within the carrying bodywork or enclosure of a closed or sheeted vehicle, that they are adequately protected or shielded to prevent mechanical damage,

(d) if the electrical apparatus is located within the carrying bodywork of a closed or sheeted vehicle or in any other enclosure of the vehicle where an accumulation of vapour of petroleum is likely to occur, the electrical apparatus is suitable for use in Division I areas as defined in British Standard Code of Practice 1003: Part 1: 1964, or it is in accordance with any other Standard or specification as may be approved of,

(e) if the electrical apparatus is fixed or located on the outside of the vehicle or in the external air within 0.75 metres of draw-off cocks or other filling or dipping openings of a tank, it is suitable for use in Division 2 areas as defined in British Standard Code of Practice 1003: Part I: 1964, or it is in accordance with any other Standard or specification as may be approved of.

(5) Unless otherwise approved of, a carrier shall ensure in the case of an electrical storage battery of a tank-vehicle conveying petroleum—

(a) that an efficient and suitable double-pole switch to enable all electrical circuits to be isolated is located and properly secured as near as is practicable to the storage battery,

(b) that the operation of the switch referred to in subparagraph (a) of this paragraph can be effected while the engine is running, without causing a dangerous surge, to secure the isolation of the battery, either by an efficient direct or remote control device; the electrical supply (if any) to a tachograph may be provided by a circuit connected direct to the battery, and the control device shall be—

(i) placed in a suitable location and distinctly marked so as to be readily accessible to any authorised person outside the driver's cab, or

(ii) placed in the driver's cab to enable the driver to operate it without leaving his seat.

(6) A carrier shall take all practicable steps to ensure—

(a) that where any storage batteries are placed or located elsewhere than under the bonnet of the engine of a vehicle, they are adequately secured in a case or cases having suitable vents and electrically insulating inner walls and lids.

45. A carrier shall ensure that where a power driven product pump is part of the equipment of a tank-vehicle for unloading petroleum, it is located and provided with clearly marked and easily accessible efficient emergency control devices all of which shall be forward of the shield provided pursuant to paragraph (a) of Regulation 43 of these Regulations.

46. (1) Without prejudice to the certificate of approval required to be issued by an approved body in respect of a tank manufactured after the coming into operation of these Regulations, a carrier shall ensure, within 18 months of the coming into operation of these Regulations, that petroleum is not conveyed in a tank-vehicle unless the vehicle has been inspected and certified by a competent person of an approved inspecting authority as conforming to or in accordance with the requirements of these Regulations in respect of—

(a) the manner of attachment of the tank to the chassis, frame or suspension of the vehicle,

(b) the electrical system,

(c) the engine, driver's cab and fire fighting equipment,

(d) the condition of the tank.

(2) A carrier shall ensure that a certificate, signed and dated by the competent person of the approved inspecting authority and issued pursuant to paragraph (1) of this Regulation, is in such form as may be approved of and shall be valid (unless otherwise approved of) for a period not exceeding 12 months and a true copy of the certificate shall be kept readily available for inspection until the tank or vehicle on which it is mounted or attached is taken out of service for conveying petroleum.

(3) A carrier shall ensure that the following particulars, namely, the day, month and year of the most recent annual inspection and certification carried out and the stamp of the competent person who

carried out the inspection and certification are permanently engraved in legible characters on a corrosion-resistant metal plate fixed and maintained in the case of—

- (a) a rigid tank-vehicle, in the driver's cab,
- (b) a tank-trailer or tank semi-trailer on the load carrying unit,
- (c) a demountable tank, on the carrying unit.

47. (1) Without prejudice to any other provision of these Regulations, a carrier shall make or cause to be made in relation to a tank-vehicle—

- (a) a safety inspection as specified in paragraph (2) of this Regulation, and
 - (b) a maintenance inspection at least once in every two months or every 8,000 kilometres, whichever is the lesser, during which period the vehicle is in use,
- but a carrier shall carry out or cause to be carried out a safety inspection or maintenance inspection at more frequent intervals if there is reason to apprehend risk of injury due to any fault or defect likely to be, or suspected to be, present in the vehicle.

(2) A safety inspection required pursuant to paragraph (1) of this Regulation shall be carried out at least once in every seven working days and it shall determine, so far as is reasonably practicable, that—

- (a) every fire extinguisher provided pursuant to Regulation 26 of these Regulations is properly located and filled and in efficient working order,
 - (b) all miscellaneous equipment required pursuant to Regulation 27 of these Regulations is provided and in good order,
 - (c) the tank, chassis, body or cab is reasonably clean and free from damage or excessive grease or oil likely to affect safe operation,
 - (d) the exposed cables or connections of the electrical wiring system of the vehicle are properly secured,
 - (e) the fuel tank and fuel oil feed pipe system are secure and are not leaking,
 - (f) the exhaust pipe of the engine is in position and functioning properly,
 - (g) the mirrors, lights, including signal lights, horn, reflectors, windscreen wipers, steering mechanism, brakes (including warning devices or instruments) are in good order and functioning properly,
 - (h) the wheel retaining nuts or bolts are properly secured and free from slackness,
 - (i) the tyres are properly inflated and free from damage,
 - (j) each tank is properly located and secured,
 - (k) the appropriate information has been supplied and is located in accordance with the requirements of Regulation 5 (5) of these Regulations,
- (1) so far as may be appropriate, the requirements of paragraph (5) of this Regulation are being complied with.

(3) A carrier shall ensure that any defects found in the course of a safety inspection or a maintenance inspection affecting the safe operation of the vehicle are remedied before the vehicle is used for conveyance.

(4) A carrier shall ensure that a report in such form as may be approved of, of each safety inspection or maintenance inspection made pursuant to paragraph (1) of this Regulation is kept available—

- (a) in the case of a safety inspection report, a period of not less than 1 month, or
- (b) in the case of a maintenance inspection report, for a period of not less than 12 months, following the date of the safety or maintenance inspection.

(5) A carrier shall ensure that the driver of a tank-vehicle reports in a suitable form on each working day whether or not any fault or defect is found in the operation of the vehicle, and the owner shall take such steps as may be necessary to remedy such fault or defect before the vehicle is further used for conveying.

(6) For the purposes of paragraph (1) of this Regulation:—

"safety inspection" means a safety inspection or preventive maintenance inspection by a competent person designed to ensure that the tank-vehicle is in road-worthy condition and free from any defect likely to affect the safe operation of the vehicle or connecting pipeline;

"maintenance inspection" means a maintenance inspection by a competent person designed to ensure that the total maintenance standard, mechanically or otherwise, of the vehicle, tank or connecting pipeline is adequate to prevent risk of injury in the normal use of the vehicle.

48. For the purpose of the work of inspection, examination, test or certification of a container, tank, vehicle, connecting pipeline or any part thereof which is required to be undertaken or carried out pursuant to a requirement of these Regulations by a person properly authorised in writing by the appropriate approved body or inspecting authority, such person shall—

(a) have free and ready access, at all reasonable times, to those parts of a premises which are engaged in the manufacture, testing or maintenance of the container, tank or vehicle, and

(b) be offered all reasonable facilities and means by or on behalf of the owner, occupier or his agents for the efficient carrying out of his duties.

49. The work of inspection, examination, testing or certification of a container, tank, vehicle, service equipment, structural equipment, connecting pipeline or any part or any part or component thereof which is required to be undertaken pursuant to a requirement of these Regulations on behalf of a carrier by the appropriate approved body or inspecting authority shall be at the expense of the carrier concerned.

SCHEDULE

Conduct of Persons in Conveying, Loading or Unloading Operations.

1. A person shall not—

(a) bring or take to or have in his possession on a vehicle conveying petroleum, or in any place where loading or unloading operations are carried on any matches, mechanical lighters, open flame or any spark-producing device or any other means of procuring a flame or any lighted pipe, lighted cigar, lighted cigarette or any other agency likely to cause risk of ignition, fire or explosion,

(b) smoke in or on a vehicle conveying petroleum or in the vicinity thereof.

2. A person shall not bring intoxicating liquor or drugs onto a vehicle conveying petroleum or into any place where loading or unloading operations are being carried on.

3. A person shall not be either intoxicated or under the influence of drugs—

(a) while in charge of, driving, steering or conducting a vehicle conveying petroleum,

(b) while in, on or attending a vehicle conveying petroleum,

(c) while engaged or employed in loading or unloading operations or in the conveying of petroleum.

4. A person employed or engaged in the conveyance of petroleum by vehicle or in loading or unloading operations shall neither use nor wear any boots, shoes or other footwear which have exposed iron or steel nails or other exposed ferrous material likely to cause risk of injury.

5. A person engaged or employed in the conveyance by vehicle of petroleum shall not, unless authorised to do so, open or interfere with any tank, container or package containing petroleum during such conveyance.

6. A person engaged or employed in loading or unloading operations or the conveyance of petroleum by vehicle shall—

(a) not strike any tank or container with any tool or implement,

(b) not throw-down any container or package containing petroleum and shall take all reasonable care not to drop any container or package containing petroleum,

(c) take, so far as it is within his control and duty so to do, all due care and all necessary precautions to prevent spillage, overflow or escape of petroleum from a tank, container, package or connecting pipeline.

7. A driver of a vehicle conveying petroleum shall not steer, conduct or drive it in a dangerous or reckless manner, or without due care and attention or at a speed or in a manner likely to cause risk of injury.

8. A person employed or engaged in or about or in connection with the conveying of petroleum or in loading and unloading operations, if it is within the scope of his duty, shall take all necessary steps to—

(a) prevent ignition, fire or explosion in or adjacent to any vehicle, tank, container or package containing petroleum,

(b) prevent any act being committed which might tend to cause ignition, fire or explosion,

(c) prevent unauthorised persons having access to a vehicle, tank, container or package containing petroleum on a vehicle,

(d) report forthwith to an authorised person—

(i) anything he may observe or discover to be unusual or dangerous in the conveying of petroleum or in the loading or unloading operations,

(ii) any defect which he may observe or discover to be apparently dangerous in relation to a vehicle, tank, container, package or connecting pipeline,

(iii) any risk of fire in or at any vehicle, tank, container, package or connecting pipeline or in the vicinity thereof, and

(iv) any breach of these Regulations.

9. Every person employed in or about or in connection with the conveyance, loading and unloading of petroleum shall comply with—

(a) any directions given to him by an authorised person for the purpose of fulfilling the requirements of these Regulations, and

(b) the requirements of these Regulations which relate to the performance of or refraining from an act by him.

10. A person shall not require another to do anything the doing of which is prohibited by these Regulations.

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 prevent risk of injury to person or property in the conveying in vehicles including road-tankers and trailers, of petroleum Class I (petroleum-spirit) or petroleum Class II and in the loading and unloading of such vehicles at petroleum stores.

The Regulations provide for—

- (a) the employment of competent persons possessing adequate knowledge, training and ability to perform their duties safely in order to prevent risk of injury to persons or property in the conveying, loading or unloading operations,
- (b) the instruction, training and supervision of persons employed,
- (c) the issue of adequate safety information in book form to drivers of tank-vehicles,
- (d) the periodic medical examination of drivers of tank-vehicles,
- (e) cloakrooms, washing facilities, first-aid and the use of suitable protective clothing for persons employed in the operations.

Requirements also relate to—

- (a) the design, construction, maintenance, inspection and certification of road-tank vehicles, trailers, tanks, containers, associated equipment, fittings and connecting pipelines,
- (b) preventing risk of ignition, explosion or fire of petroleum vapours due to electricity, static electricity or other source of ignition,
- (c) preventing spillage, leakage or escape of petroleum or ignition of petroleum vapours during loading, unloading or conveying operations,
- (d) transport documents, vehicle signs, markings, labelling, packaging and action to be taken in an emergency such as the breakdown of a vehicle, road accident or leakage or spillage of loads carried on vehicles,
- (e) fire-fighting appliances to be carried on vehicles, and
- (f) arrangements governing parking and attendance on tank-vehicles.

Other matters covered by the Regulations include safe operational procedures and practices to be observed by carriers and drivers on the conveying, loading and unloading of petroleum Class I and petroleum Class II.

Source: Irish Statute Book Database

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