

L.N. 71 of 1967

PETROLEUM ACT (CAP. 150)

Petroleum Regulations 1967

Commencement : 8th March 1967

In exercise of the powers conferred by section 3 of the Petroleum Act and of all other powers enabling it in that behalf, the Federal Executive Council hereby makes the following regulations :

- 1.—(1) These regulations may be cited as the Petroleum Regulations 1967.
- (2) These regulations shall in so far as they are made under powers conferred by section 3 (1) of the Petroleum Act (hereafter referred to as "the Act") apply to the whole of the Federation, but in so far as they are made under the powers conferred in section 3 (2) thereof apply to the Federal territory.
- (3) The Petroleum Regulations (Regulations 27 of 1928) as amended are hereby revoked.

Citation
and
extent.

2. In these regulations, unless the context otherwise provides :—

"the Act" means the Petroleum Act.

"appropriate authority" means—

(a) in relation to transport and storage of petroleum within the Federal territory, the Town Clerk to the Lagos City Council or the Lagos City Council itself as the case may require,

(b) in relation to transport of petroleum by rail, the Government Inspector of Railways,

(c) in relation to transport of petroleum on Federal trunk roads outside the Federal territory, the Director of Federal Public Works ;

"approved electrical flameproof installation or approved electrical flame proof appliances" as the case may be, means equipment certified flameproof for gases Buxton Group II in conformity with British Standard 229 or National Board of Fire Underwriters Regulations of the United States of America, or other approved regulations or code of practice for flameproof or explosion-proof enclosures ;

"approved type" in relation to fire extinguishers means a fire extinguisher of a type approved by the Federal Fire Commissioner as suitable for fighting a petroleum fire ;

"approved vehicle" means a vehicle constructed in accordance with these regulations ;

"articulated vehicle" means a motor vehicle with a trailer drawn thereby which is so constructed that a substantial part of the weight of the trailer is borne by the motor vehicle being free to articulate about the point of attachment when in motion and is readily detachable therefrom ;

"boat" means any vessel not propelled by mechanical power and includes any lighter or barge ;

"case of petroleum" means a wooden box (the thickness of the wood whereof shall not be less than three-eighths of an inch) containing two tins, each of which holds approximately, but not more than, four and one-sixth gallons of class "A" petroleum ;

"Chief Petroleum Engineer" means the officer of the Federal Ministry of Mines and Power for the time being performing the functions of Chief Petroleum Engineer ;

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tion.
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'class "A" petroleum' comprises all hydrocarbon liquids having a flash point below 73°F and all petroleum stocks with a flash point below 200°F that are being handled at temperatures above their flash point ;

'class "B" petroleum' comprises all hydrocarbon products having flash points from 73° to 150° F inclusive ;

'class "C" petroleum' comprises all hydrocarbon products having flash points above 150°F ;

"flash point" means the degree of temperature at which petroleum gives off a flammable vapour upon being tested by either the Abel closed cup tester or the Pensky-Martens closed tester ;

"filling shed" means a building used for the purpose of filling petroleum containers ;

"fine concrete" means concrete made up of one part of cement (which shall be sulphate resisting where considered necessary by the appropriate authority) two parts of dry, clean, sharp, graded sand to pass three sixteenths of an inch mesh, and four parts of clean gravel or crushed stone to pass three quarters of an inch mesh ;

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"Federal Fire Commissioner" means the Federal Fire Commissioner within the meaning of section 3 of the Fire Service Act 1963 ;

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"government inspector of shipping" means any officer so designated for the purposes of section 418 of the Merchant Shipping Act 1962 ;

"government petroleum store" has the meaning assigned to it by regulation 34 (4) of these regulations ;

"harbour master" means a harbour master duly appointed by the Nigerian Ports Authority for a port under section 40 of the Ports Act and shall include any person authorised by that Authority to assist him ;

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"L.P.G." or "liquefied petroleum gas" means any petroleum product which is gas at normal atmospheric temperature and pressure and, being liquefiable under pressure, is normally stored and handled as a liquid ;

"motor vehicle" means any vehicle or vessel propelled by a motor, in which petroleum is used as fuel and includes steam vehicles or vessels with petroleum fired boilers ;

"naked light" includes any unprotected source of thermal or electrical action which produces sparks or is capable of igniting petroleum or petroleum vapours ;

"Permanent Secretary" means the Permanent Secretary of the Ministry of the Government of the Federation responsible for matters relating to mines and power and includes any other officer of that Ministry duly authorised by him to act on his behalf ;

"petroleum in bulk" means petroleum in any receptacle having a capacity of three hundred gallons or upwards whether on a ship or on shore ;

"prescribed port" means the Port of Lagos and includes any other port which the Permanent Secretary of the Ministry of the Government of the Federation responsible for matters relating to ports may by notice in the Gazette prescribe as such for the purposes of these regulations ;

"protected works" includes buildings in which persons dwell or assemble, docks, wharves, timber yards, public roads, and any other place not forming part of an installation which the Permanent Secretary may by order declare as protected works, but does not include the time keeper's or administrative office of an installation ;

"railway tank wagon" means a wagon specially constructed for the carrying and distribution of petroleum in bulk by rail or a dual purpose tank wagon with separate containers to carry either mineral oil or vegetable oil ;

"small craft" includes any vessel not exceeding fifteen tons burden ;

"storage shed" means a building used for the storage of class "A" petroleum exceeding forty gallons otherwise than in bulk or class "B" petroleum exceeding two hundred gallons otherwise than in bulk ;

"tank vehicle" means a motor vehicle specially constructed in accordance with these regulations for the carrying and distribution of petroleum in bulk by road, and includes an articulated vehicle ;

"tanker" means any ship or vessel, as defined by the Merchant Shipping Act 1962, in which the greater part of the cargo space is constructed or adapted for the transport of liquid petroleum, its derivatives or similar commodities in bulk and which is not for the time being carrying some other cargo in that part of its cargo space and shall include any ship having on board or about to take on board a cargo, the whole or any part of which consists of petroleum or having discharged petroleum if the holds, tanks and pipelines have not been rendered free from flammable vapour to the satisfaction of the harbour master ;

"testing officer" means a person appointed as testing officer for any port by the Permanent Secretary of the Ministry of the Government of the Federation responsible for matters relating to ports ;

"tin of petroleum" means a metal receptacle, each of the sides whereof is of a thickness of not less than .0123 of an inch and the top and bottom parts thereof are of a thickness of not less than .0123 of an inch.

3. An appropriate authority issuing any licence under these regulations shall send a copy of the licence to the Chief Petroleum Engineer.

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Copy of licence for Chief Petroleum Engineer.

4.—(1) The Chief Petroleum Engineer may by notice in writing require any company or person who has obtained a licence or licences under any of these regulations or any refinery in Nigeria to submit to him such returns and other information as he may require from time to time, in such form and at such times as he may specify in the notice.

Prescribed returns.

(2) Without prejudice to the generality of the foregoing paragraph, monthly returns of imports, refinery off-takes, exports sales and receipts shall be submitted in a form prescribed by the Chief Petroleum Engineer to reach his office not later than the 21st day of the month following that to which they relate.

5. Nothing in these regulations shall apply to class "B" petroleum, unless where otherwise stated or implied.

Application.

PART I.—IMPORTATION, SHIPPING, UNSHIPING AND LANDING PETROLEUM

A.—General

6.—(1) No petroleum shall be imported into Nigeria at any port other than a prescribed port, unless the consent in writing of the Chairman, Board of Customs and Excise has been first obtained and subject to such conditions as he may specify.

Entry into prescribed port.

(2) Any person desiring to import petroleum at a port other than a prescribed port shall apply to the Chairman, Board of Customs and Excise in writing, stating the quantity and kind of petroleum which he desires to import.

Display of
flag and
light.

7. The master of every tanker shall, on entering the harbour, and during the time that such ship remains in the harbour, display by day a red flag not less than 3 feet square, with a white circular centre 6 inches in diameter, and by night a red light, at the mast head or where it can be best seen but not less than 20 feet above the deck and of such a character as to be visible all round the horizon at a distance of at least 2 miles, in addition to any navigation lights which may be required by any other law :

Provided that in the case of tanker being a petroleum barge which cannot normally comply with this regulation, the master of such tanker shall display by day in a conspicuous position above the deck a red flag or metal not less than 18 inches square with a white circular centre 6 inches in diameter and by night an all round red light.

Declaration
of quantity
and quality
of petroleum
carried by
ships
entering
harbour.

8. The master of every ship carrying petroleum shall before entering a prescribed port deliver to the pilot, if one is in charge of the ship, or to the boarding officer in other cases, a written declaration under his signature stating—

- (a) what quantity of petroleum the ship is carrying ;
- (b) whether any, and if so, what quantity of the petroleum is class "A" petroleum ;
- (c) whether any, and if so, what quantity of the petroleum is class "B" petroleum ;
- (d) whether any, and if so, what quantity of the petroleum is in bulk ;
- (e) what quantity of petroleum (specifying what part of it belongs to each of the classes "A" and "B") it is intended to land at that port or at any other port in Nigeria,

but if in anticipation of a ship's arrival, the agent of such ship delivers to the harbour master a written declaration as aforesaid under his signature, no such declaration shall be necessary by the master of the ship.

Declaration
by ship
leaving
harbour.

9. The owner of petroleum to be exported from a port shall, in addition to complying with all requirements relating to the customs which are applicable thereto by law, deliver to the harbour master, before and after loading any ship, written declarations under his signature stating :—

- (a) in the case of a declaration made before loading a ship—
 - (i) the approximate quantity of petroleum with which that ship will be loaded ;
 - (ii) the quantity of class "A" petroleum ;
 - (iii) the quantity of class "B" petroleum ;
 - (iv) whether any, and if so, what quantity of the petroleum is in bulk ;
- (b) in the case of a declaration made after loading—
 - (i) the quantity of petroleum with which the ship has been loaded ;
 - (ii) the quantity of class "A" petroleum ;
 - (iii) the quantity of class "B" petroleum ;
 - (iv) whether any, and if so, what quantity of the petroleum is in bulk.

Delivery of
declarations.

10. A declaration delivered under regulations 8 and 9 of these regulations—

- (a) to a pilot or boarding officer shall without delay be delivered by him to the harbour master ;
- (b) to a harbour master (whether by an agent, pilot or boarding officer) shall without delay be delivered by him to the Collector of Customs and Excise.

11. The master of a ship carrying petroleum shall anchor or moor his ship at such anchorage or place as the harbour master may direct, and the master shall not move his ship therefrom without the written permission of the harbour master.

Anchorage of ship according to direction.

12.—(1) The master of every ship carrying petroleum shall, if required by the Collector of Customs and Excise, deliver to him without charge, samples of every variety of petroleum which it is intended to land at such port or any other port in Nigeria, for the purpose of having the same tested by the testing officer.

Testing of samples of petroleum.

(2) When the samples aforesaid have been delivered to the Collector of Customs and Excise, he shall forward them to the testing officer who shall as soon as practicable test the same, and sign and forward to the Collector of Customs and Excise a report certifying that they are or are not class "A" petroleum as the case may be.

(3) Until the testing officer shall report that any petroleum is not class "A" petroleum, it shall be deemed to be class "A" petroleum, and shall be dealt with as such.

13. No petroleum shall be discharged or allowed to escape into the waters of the port.

Prohibition of discharge into waters.

*B.—Petroleum in Bulk
Loading or discharging of Petroleum, etc.*

14. The following requirements shall be duly observed in the case of every tanker within any harbour :—

Requirements to be complied with while tanker is within harbour.

(a) Before any loading or discharging of petroleum or ballast water, or any gas-freeing or tank cleaning is carried out, the owner shall give due notice to the harbour master of the time and place of such loading, discharging, gas-freeing or tank cleaning.

(b) After all petroleum has been removed from any tanker, the holds and tanks shall be rendered gas-free :

Provided that this regulation shall not require to be gas-free the tanks of a tanker which leaves the harbour without delay after the discharge of petroleum or remains only for the purpose of taking on board bunkers, stores or ballast, or for such other purposes as may be approved by the harbour master and if the tanks are closed down immediately after the discharge of such petroleum, and are not re-opened whilst the tanker is within the harbour, except—

(i) for filling up or sounding while taking in or discharging ballast water, or

(ii) with the permission of the harbour master.

(c) The loading or discharging of petroleum spirit or ballast water, and the rigging and disconnecting of hoses shall not be permitted between sunset and sunrise unless—

(i) adequate safe illumination is provided on board the ship, the equipment used for such illumination is designed, constructed and maintained in accordance with Lloyd's Register of Shipping or other approved Classification Society's requirements in relation to the position in the ship in which it is installed ;

(ii) safe lighting in accordance with regulation 15 is provided on shore adequately to illuminate the ship when alongside the quay :

Provided that if anything occurs during the loading or discharging of petroleum or ballast water between sunset and sunrise to necessitate a repair to the plant, pipes or connections, or to interfere in any way with the uninterrupted flow of the petroleum or ballast water, such operations shall be stopped and not resumed until adequate safety measures have been taken.

(d) From the time when the holds or tanks are first opened for the purpose of loading or discharging petroleum or ballast water, until such time as the holds or tanks shall have been securely closed down and in the case of complete discharge, rendered gas-free as required by this regulation, there shall be no fire or artificial light on board such ship :

Provided that this regulation shall not prevent the use of lamps, heaters, cookers or other apparatus electric or otherwise, designed and constructed in accordance with Lloyd's Register of Shipping or other approved Classification Society's requirements in relation to the position in the ship in which it is installed, and maintained in accordance with such requirements :

Provided further that this regulation shall not be deemed to prohibit the loading, discharging, ballasting, gas-freeing or tank cleaning of a tanker under conditions approved by the harbour master by means of steam from her own boilers, power generated on board by electrical plant or internal combustion engines, designed, constructed, installed, positioned and maintained in accordance with Lloyd's Register of Shipping or other approved Classification Society's requirements or by steam or electric power supplied from the shore and connected by equipment which shall comply with such requirements and with the following requirements related to electrical equipment, where these are additional—

(i) the connection between the shore cable and the ship shall be made by means of a connection box in accordance with Lloyd's Register of Shipping or other approved Classification Society's requirements ;

(ii) the cable shall be flexible tough-rubber sheathed type in accordance with B.S. 7 or other cable equally suitable for the purpose ;

(iii) means, as by a changeover switch or suitable interlocking device, shall be installed at the ship's switchboard or at any terminal board in the ship to which electric cable from a shore supply is connected to prevent the shore supply from being connected to the ship's switchboard while this is connected to the ship's generating plant ;

(iv) all electrical equipment used in or in connection with the shore supply to the ship shall be maintained in such condition as to prevent danger from electric shock or fire.

(e) The owner shall take adequate steps to prevent any person under his control from smoking and from carrying fuses, matches or any appliance whatsoever for producing ignition at or near any place where petroleum or ballast water is being discharged or loaded or where gas-freeing or tank cleaning is being carried out.

(f) All openings from cargo tanks (except the gas escape line) shall, save with the special permission of the harbour master, be kept closed during the loading or discharging of petroleum or ballast water except that—

(i) ullage plugs or sighting ports not situated in enclosed or partially enclosed space may be removed for ullaging, sounding or sampling, such ullage plugs or sighting ports to be closed immediately this has

been done unless they are adequately protected by strong noncorroding wire gauze which shall be kept clean and free from obstruction, of mesh not less than 28 to the linear inch and of gauge not less than 28 S.W.G. or other flameproof device which complies with Lloyd's Register of Shipping or other approved Classification Society's requirements;

(*ii*) ullage plugs or sighting ports situated in enclosed or partially enclosed spaces may, with the special permission of the harbour master, be removed for the purpose of ullaging, sounding or sampling but such ullage plugs or sighting ports must be closed immediately this has been done.

(*g*) All pipes and other appliances used in the loading or discharging of petroleum spirit in bulk or of ballast water shall be reasonably free from leakage. All pipe lines and hoses shall whilst rigged for loading or discharging petroleum or ballast water, be adequately and continuously earthed and kept constantly under supervision.

(*h*) When the discharging or loading of petroleum or ballast water has been commenced such discharging or loading shall be carried out with due diligence, and if it is discontinued the tanks and holds of the tanker shall immediately be closed.

(*i*) No petroleum shall be brought to the place of loading until the tanker into which it is to be loaded is in readiness to receive it.

(*j*) Instruments made of iron, steel or other material capable of causing a spark shall not be used for the purpose of opening or closing the hatches or tank lids of a tanker, or for any other purpose in connection with the loading or discharging of petroleum or ballast water, or gas-freeing or tank cleaning and no scraping, chipping, or other work which might cause sparks shall be allowed during the period of the above operations.

(*k*) Save with the approval of the harbour master no anchor shall be down whilst the tanker is alongside for the purpose of discharging or loading.

(*l*) There shall be hung over both bow and stern a connecting shackle attached to a wire having an eye in the end and that wire shall be secured onboard so that a tow rope can be easily fastened thereto in case of emergency.

(*m*) During a storm accompanied by lightning in the close vicinity all loading or discharging of petroleum shall be suspended and valves and tanks closed.

(*n*) No unauthorised craft shall be permitted to lie alongside or approach near to a tanker loading or discharging class "A" petroleum.

15. Fires, lights or electrical apparatus other than electrical filament lamps, or self-contained electric lamps, heaters, cookers, or other types of safe apparatus so designed, constructed and maintained as to be incapable of igniting flammable vapour, shall not be used on or near a quay upon which petroleum is lying, or at which petroleum or ballast water is being discharged from or loaded into a tanker, or at which gas-freeing or tank cleaning is being carried out by a tanker.

Fires, lights and electrical apparatus not to be used on or near quay.

16. Two or more tankers shall not, except for purpose of transshipment, lie within 100 feet of one another unless in the opinion of the harbour master it is impracticable to maintain such distance.

Distance between ships.

Tanker to be watched.

17. Every tanker shall be watched by a competent member of the crew on board such ship until all petroleum or ballast water shall have been discharged or loaded or the operations of gas-freeing or tank cleaning completed and the holds or tanks securely closed and every tanker shall at all times have on board a responsible person to carry out and give effect to the provisions of these regulations.

Fire fighting alert.

18. All ship and shore fire-fighting appliances shall be kept ready during the operations of loading and discharging petroleum or ballast water or gas-freeing or tank cleaning.

Police or fire officer to be on guard.

19. Whilst a tanker is lying alongside for the purpose of loading or unloading petroleum in bulk a member of the police force not below the rank of Inspector or a fire officer or other officer authorised by the harbour master shall, if so instructed, visit the ship for the purpose of seeing that these regulations are being complied with and for taking appropriate action against any person committing a breach of these regulations.

Tanker discharging at below the rate of 80 tons per hour.

20. A tanker not discharging petroleum at the minimum rate of eighty tons an hour shall be liable to be removed from the wharf, at the direction of the harbour master, provided that, in the event of any accident to pumps, or other gear, which necessitates the stoppage of pumping, an allowance will be made for such time as is occupied in repairs.

C.—Petroleum not in Bulk—Class "A" Petroleum

Mode of carriage of class "A" petroleum.

21. No class "A" petroleum shall be imported or exported otherwise than in bulk unless contained either in strong receptacles so constructed as not to be likely to be broken in handling or to become defective or insecure whilst being conveyed, or to allow the petroleum to escape or to be accidentally opened, or in tins securely packed in wooded cases. Such receptacles or cases shall be plainly marked in accordance with the recommendation of the Standing Advisory Committee on the Carriage of Dangerous Goods and Explosives in Ships in the United Kingdom.

Precautions before unshipping class "A" petroleum.

22. Before any class "A" petroleum is unshipped the hold containing the petroleum shall be thoroughly ventilated, and when the hold has been emptied it shall be thoroughly cleaned.

Approval of vessel to convey class "A" petroleum.

23.—(1) Class "A" petroleum which is not off-loaded at an authorised wharf or other place shall not be conveyed to or from any ship except in boats or small craft which have been approved by the Government Inspector of Shipping for the purpose.

(2) Such petroleum shall not be discharged at any wharf until the vessel or carriage by which the same is to be removed therefrom shall be at the place in readiness to receive the same, and all petroleum discharged in the harbour shall be forthwith removed therefrom or to some duly licensed place or storage or to moorings, the position of which has been approved by the harbour master.

Prohibition of naked light on deck.

24. Whilst loading or discharging is proceeding, no naked light or smoking shall be allowed on the deck of the ship.

Small craft carrying class "A" petroleum.

25. Small craft carrying class "A" petroleum shall be moored to buoys or anchored where directed by the harbour master, and shall not lie alongside any ship or wharf, except for the purpose of loading or discharging, or when empty.

26.—(1) A red light shall be exhibited not less than six feet above the deck on every craft carrying class "A" petroleum within the limits of any port.

Precautions to be taken by craft carrying class "A" petroleum.

(2) No small craft carrying class "A" petroleum shall be within the limits of any port between the hours of sunset and sunrise unless it is anchored or moored at such place as the harbour master may in writing direct.

(3) A small craft carrying class "A" petroleum within the limits of any port shall exhibit only such lights as the harbour master shall from time to time direct.

(4) Every such small craft shall at all times have on board not less than one hundred pounds of dry sand in such a position as to be immediately available for use when required.

(5) The bilges of any such small craft shall not be pumped out while it is alongside any vessel or wharf or in confined waters.

(6) Immediately after the discharge of class "A" petroleum the small craft shall be thoroughly ventilated and cleaned out.

27. No naked light or smoking shall be allowed on any small craft carrying class "A" petroleum within the limits of any port.

Prohibition of naked light and smoking on small crafts.

28. No loading or discharging of class "A" petroleum shall proceed between the hours of sunset and sunrise, and the hatches of any small craft carrying class "A" petroleum shall be closed at sunset and shall not be re-opened until sunrise, and if the craft is alongside a ship or wharf it shall be towed away to a buoy or anchorage appointed by the harbour master.

Conditions for loading or discharging class "A" petroleum.

29.—(1) Class "A" petroleum shall not be put on or off shore except at a wharf or other place appointed by the harbour master for the purpose.

Loading or off-loading of class "A" petroleum.

(2) No naked light or smoking shall be allowed on or in the vicinity of the wharf or other place whilst class "A" petroleum is being landed or shipped.

30.—(1) No class "A" petroleum shall be put on board any ship which is carrying any other cargo of an explosive or dangerous nature, unless such cargo is stowed in a separate hold, or such precautions are taken to the satisfaction of the harbour master, by ventilation and the provision of bulk-heads or otherwise, as shall effectually prevent the accumulation of vapour from the petroleum and such vapour from reaching that part of the ship in which the explosive or other dangerous cargo is stowed.

Petroleum carried with other cargo.

(2) The shipping of class "A" petroleum in unprotected tins on any ship is prohibited: Provided that tins, the outer covering of which has become damaged or has been accidentally removed, may be carried on deck, if they are kept in a place by themselves, and away from any fire or lights.

31.—(1) Power driven vessels carrying class "A" petroleum between Nigerian ports, or from one place to another in the inland waters, should be fitted with a watertight cofferdam of at least one frame space in length from the bulkhead separating the boiler-room or engine room the holds next to the boiler-room or engine room.

Power driven vessels carrying class "A" petroleum.

(2) In the absence of such cofferdam no class "A" petroleum shall be carried in the hold next to the boiler-room or engine room unless the vessel is fitted with a cross bunker separating the boiler-room or engine room from the hold, and the bulkhead nearest to the hold is watertight.

(3) While the petroleum is on board any sluice or other connections to the engine and boiler-rooms, shall be kept closed.

Class "B" Petroleum

Carriage of
class "B"
petroleum.

32.—(1) Class "B" petroleum shall not be put on or off-shore except at a wharf or place approved by the harbour master.

(2) Such petroleum may be unshipped into any boat, which has the free-board prescribed for open boats by regulation 9 of the Merchant Shipping (Licensing and Control of Boats) Regulations 1963.

(3) A boat carrying class "B" petroleum shall not lie alongside any wharf for any period longer than is required for the loading or discharging, and whilst the loading or discharging is taking place no fire or light of any description except as described in regulation 14 (d) shall be allowed on or in the vicinity of the boat.

(4) Loading and discharging of class "B" petroleum shall not proceed between sunset and sunrise.

(5) A boat carrying class "B" petroleum shall exhibit a red flag by day, and a red light by night.

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Power driven
vessels
carrying
class "B"
petroleum.

33.—(1) Power driven vessels carrying class "B" petroleum as cargo between Nigerian ports or from one place to another in the inland waters shall not carry such petroleum within five feet of the bulk head separating the boiler-room or engine-room from the adjoining hold unless fitted with a cross bunker or cofferdam.

(2) Such petroleum shall be stowed on a vessel in such manner as to prevent the cases becoming damaged by the shifting of cargo.

(3) While such petroleum is on board a vessel, any sluice or other connection to the engine and boiler-room shall be kept closed.

PART II—STORAGE OF PETROLEUM

A.—General

34.—(1) Premises whereon petroleum is kept shall be licensed for that purpose under these regulations whenever:—

(a) class "A" petroleum only is kept and exceeds one hundred and twenty-eight gallons in quantity;

(b) class "B" petroleum only is kept and exceeds two hundred gallons in quantity;

(c) class "A" petroleum together with class "B" petroleum is kept and the total quantity exceeds two hundred gallons or the quantity of class "A" petroleum exceeds one hundred and twenty-eight gallons.

(2) A licence shall be required under paragraph (1) of this regulation if the amount of class "A" petroleum—

(a) in tins exceeds forty gallons, or

(b) in drums exceeds ninety-two gallons.

(3) The provisions of this regulation shall not apply—

(a) to petroleum kept in a government petroleum store;

(b) to petroleum to be used as fuel for a motor vehicle kept in the tank normally forming part of that vehicle;

Premises
to be
licensed.

(c) to petroleum in tins or cases in transit by rail when temporarily held at a tranship or delivery station, provided such petroleum is removed to a special open enclosure and distinguished by adequate warning notice.

(4) For the purposes of this regulation government petroleum store includes any petroleum store under the management and control of a local authority.

35. Licences under regulation 34 may be issued by an appropriate authority and shall ordinarily be granted only where the premises intended to be used for the storage of such petroleum comply with the requirements of regulation 36 :

Issue of
licences.

Provided that the appropriate authority may, with the prior approval of the Permanent Secretary, grant a licence dispensing with any or all the requirements of regulation 36 and any licence so granted shall be endorsed accordingly.

36.—(1) Subject to paragraphs (2) and (3) of this regulation the following conditions shall apply to the construction, maintenance and operation of storage sheds and shall be specified in all licences for the storage of petroleum :—

Storage
sheds.

(a) where licences are granted for the storage of any quantity of petroleum in any one building—

(i) the sills of the doorways and other openings of the storage shed shall, so as to form a well for the reception of the petroleum, be at a height not less than six inches above the floor level of the building ; or

(ii) the building itself shall be surrounded with a masonry wall or embankment or both not less than three feet high :

Provided that the enclosures formed whether under sub-paragraph (a) (i) or (ii) of this paragraph shall be capable of retaining the total quantity of petroleum to be stored in the event of its escape from the receptacle or receptacles in which it is contained, but where the storage shed is to be used solely for the storage of petroleum in receptacles which comply with the provisions of regulation 38 (2) (a) and (b) the enclosure or well referred to in sub-paragraphs (a) (i) and (ii) of this paragraph may be constructed in accordance with plans and specifications approved by the Engineer to the appropriate authority so as to be capable, in the event of the escape of petroleum from its receptacles, of containing such amount as may be decided on in each case by the Engineer to the appropriate authority but that amount shall not be less than one quarter of the total quantity of petroleum to be stored in such building ;

(iii) no water shall be allowed to accumulate within an enclosure or well formed as provided in sub-paragraphs (a) (i) and (ii) of this paragraph and any drainage system, which has an outfall to beyond the enclosure or well, shall be constructed in accordance with plans and specifications approved by the Engineer to the appropriate authority or any person authorised to give such approval on his behalf and shall be provided with an outlet controlled by a valve or valves which can be actuated from outside such enclosure or well. Such valve or valves shall be kept closed except when it is necessary to open them for the discharge of water ;

(b) a clear space of at least three feet in width must be left between the various storage sheds and a clear space of at least twenty feet, between such sheds and protected works and the boundaries separating adjoining plots ;

(c) there shall be a space of at least fifty feet between storage sheds containing class "A" petroleum and sidings on which working locomotives pass ;

(d) the storage shed shall be constructed entirely of non-flammable material and may have a rammed earth floor : Provided always that elsewhere than in municipalities wood may, at the discretion of the appropriate authority, be employed in construction of such parts of the storage shed as are above ground level ;

(e) the building itself shall be protected by a lightning conductor as approved by the appropriate authority, except in the case of a steel-framed structure which must be adequately earthed ;

(f) adequate ventilation shall be provided ;

(g) every person managing or employed on or in connection with a storage shed shall abstain from any act whatever which tends to cause a fire and which is not reasonably necessary and shall prevent any other person from doing such act ;

(h) no smoking shall be permitted in or adjacent to storage shed and suitable notice to this effect shall be conspicuously posted on the premises ;

(i) no fire or naked lights shall be permitted in or adjacent to a storage shed ;

(j) where electricity is used for lighting or other purposes in or within 50 feet of a storage shed the apparatus shall consist of an approved electrical flame-proof installation or appliances and all cable glands and bolted cable couplers shall be constructed and installed in conformity with the relevant British Standard for flame-proof fittings of this type, or the relevant American Codes where explosion proof fittings are used ;

(k) all apparatus, cables, fittings and other equipment shall be installed and maintained to ensure that neither the flame-proof nor explosion proof characteristics, as the case may be, are invalidated ;

(l) adequate supplies of sand or dry earth as well as an adequate number of fire extinguishers of an approved type shall be kept available for use in case of fire ;

(m) the capacity in gallons shall be conspicuously marked on the storage shed ;

(n) no receptacle containing petroleum shall be opened and no petroleum shall be drawn from any receptacle within the building in which the petroleum is stored ;

(o) if the appropriate authority by notice in writing requires the holder of the licence to execute any repairs to any part of the installation which may, in the opinion of such authority, be necessary for the safety of the premises in respect of which the licence is granted and of adjacent premises, the holder of the licence shall execute the repairs within such period, not being less than one week from the date of the receipt of the notice, as may be fixed by the notice ;

(p) such other conditions, as may with the approval of the Permanent Secretary be required in any particular case.

(2) Any condition specified under paragraph (1) of this regulation may be waived in respect of any storage shed which had been licensed under the regulations in force prior to the commencement of these regulations and so long as any such storage shed remains, in the opinion of the appropriate

authority serviceable, he may, at his discretion and subject to such conditions as he may impose, grant a licence for the storage of petroleum in it although it does not comply with the conditions prescribed by this regulation.

(3) Any alterations to installations licenced prior to these regulations shall comply with the provision of these regulations.

37.—(1) Subject to paragraphs (2) to (5) of this regulation the appropriate authority may, with the prior approval in writing of the Permanent Secretary, grant a licence for the storage of petroleum in underground tanks for the purpose of retailing to the public.

Underground storage for kerbside and garage pumps, etc.

(2) An applicant for such a licence shall, prior to submitting his application to the appropriate authority—

(a) give to the Permanent Secretary full details of his proposals and such other information as the Permanent Secretary may require ;

(b) obtain the Permanent Secretary's consent in writing to the proposals.

(3) The application shall be accompanied by—

(a) evidence that the written consent mentioned in paragraph (2) above has been obtained ;

(b) a plan showing the buildings existing or proposed on the site and the relation of the site to the roadways and adjoining property ;

(c) a certificate signed by the Federal Fire Commissioner, or by an officer authorised by him in that behalf, that he is satisfied that the arrangements proposed for the prevention of fire are satisfactory, and in accordance with paragraph 5 (u) of this regulation ;

(d) a certificate signed by a Provincial Police Officer or the superior Police Officer in charge of a Police Motor Traffic Division that he is satisfied that the site and layout of the proposed filling station do not constitute an unnecessary traffic hazard.

(4) All underground tanks shall be constructed of not less than a quarter of an inch plate and, if so required by the appropriate authority, be provided with a manhole, and shall satisfy the following provisions :—

(a) all seams shall be welded ;

(b) arrangements to the satisfaction of the appropriate authority shall be made for the prevention of damage to the bottom of the tank by impact from the dipstick by welding a metal strip of not less than six inches square or metal disc of not less than six inches in diameter to the bottom of the tank immediately below the dip-pipe ;

(c) the metal strip or disc referred to in sub-paragraph (b) of this paragraph shall be steel plate not less than a quarter inch in thickness ;

(d) all rust and scale shall be removed from the exterior of the tank and the tank shall then be painted on the outside with one coat of red lead of a standard type and specification and the liberal coat of bitumen, or alternatively, the tank shall be painted with two coats of bituminous paint, to the satisfaction of the appropriate authority.

(5) The following provisions shall also apply to underground tanks :—

(a) The excavation should permit the tank to be not less than 2 feet below ground level when the tank is set in its final position.

(b) Where the soil is of good quality, that is to say, non-corrosive, the tank can be set in a simple excavation and subsequently back-filled with soil.

(c) Where the soil may be corrosive, the tank may be similarly installed, but surrounded in inactive puddled clay, clean shingle, or sweet sand, free of extraneous matter.

(d) Where the water table is high or there is risk of flooding, the tank should rest upon and be strapped to a concrete raft, or a combined concrete raft and cradle, which in either case must be of sufficient weight to overcome tank buoyancy, and back-filled as above.

(e) At locations where any leakage from the tank may find its way into local drains, wells, or other water supplies, water-ways, or public service, the tank should be set in a chamber of waterproof concrete or a chamber in the form of a concrete raft with brick or concrete walls, 9 inches thick, rendered on the inner surface with neat cement. The space between the tank and the chamber walls should be back-filled as above.

(f) Where underground tanks are placed under a building they must be covered with reinforced concrete of not less than nine inches in thickness and must be filled only from the outside of the building in the open through oil tight pipes fitted with screwed, flanged or approved type caps or valves.

(g) The chamber of every tank installation shall be raised above the level of the surrounding ground to prevent the ingress of surface water, and all pipelines, including the ventilating pipe below ground level, shall be protected against damage and corrosion to the satisfaction of the appropriate authority.

(h) No tank shall be lowered into an excavation unless and until the appropriate authority has been given prior written notice or information of the fact within a reasonable time.

(i) All underground tanks shall be tested for leakage with 5 p.s.i. air pressure applied for 2 hours or such longer period as the appropriate authority may specify and the pressure will be applied after the tank has been placed in position and prior to back-filling, and thereafter a further similar test shall be undertaken and witnessed by a competent person when the several pipelines and fittings have been assembled ready for operation, during which period there shall be no loss of pressure.

(j) The foregoing test for leakage shall be repeated :

- (i) five years after the installation ;
- (ii) ten years after the installation ;
- and thereafter—
- (iii) at two yearly intervals until twenty years after installation ;
- and thereafter—
- (iv) at yearly intervals,

and the results of each test shall be recorded in a book kept for that purpose by the licensee and countersigned by an officer of the appropriate authority or by an officer appointed in writing by the Chief Petroleum Engineer :

Provided always that the appropriate authority may direct that installations shall comply with special conditions where special circumstances exist.

(k) Any scales or rust or similar matter removed or scrapped from the interior of underground tanks shall be disposed of in a manner satisfactory to the Chief Petroleum Engineer.

(l) All individual tanks must be provided with efficient electrical earth connections independent of pipe connections, having an electrical resistance value not exceeding ten ohms when measured by an earth resistance tester of the "Megger" or similar type.

(m) The capacity of any individual tank shall not exceed five thousand gallons.

(n) All fixed pipes must be of metal and be in positions where they will not be liable to be damaged.

(o) Pipes for filling the tanks must extend inside to within six inches of the bottom of the tank and must be fitted with screwed flanged or approved instantaneous metal couplings for their connection to the source of supply.

(p) Vehicles must stand in the open when their tanks are being filled.

(q) The pump or pumps shall be placed in the position shown on a plan submitted; the pipe connection between the tank and the pump or pumps shall be placed underground and all joints, valves and cocks of an approved type shall be installed and maintained in a gas-tight condition.

(r) When charging the tanks of motor vehicles the petroleum shall be pumped through approved measuring receptacles fixed in approved positions through sound, metallic, reinforced or other suitable hose of an approved type (electrically earthed or grounded if composed in part of metal) fitted with an approved quick-acting leak-proof valve and an approved nozzle.

(s) If an officer of the appropriate authority, or an officer appointed by the Chief Petroleum Engineer, by a notice in writing directs the holder of a licence to execute any repairs to the installation, which may, in the opinion of such officer be necessary for safety, the holder of the licence shall execute the repairs within such a period as may be fixed by the notice; provided that such period shall be not less than one week from receipt of the notice.

(t) All due precaution shall be taken to prevent unauthorised persons from having access to any petroleum kept and to the supply tank.

(u) No artificial light other than electric light may be used near tanks or pumps and every person employed on or in connection with such storage and distribution shall, when near storage or distribution apparatus, abstain from any act whatsoever which tends to cause fire or explosion and which is not reasonably necessary and shall prevent any other person, whilst near such apparatus, from doing any such act.

(v) Buckets filled with dry earth or sand and at least one extinguisher of an approved type shall be provided near the pumps.

(w) The installation shall be liable to inspection by any officer duly authorised in that behalf by the appropriate authority or by the Chief Petroleum Engineer.

(6) The appropriate authority may make special rules for the storage of class "B" petroleum in above-ground tanks for the purpose of retailing to the public.

(7) The Permanent Secretary may cause the appropriate authority to revoke any licence granted under this regulation if the licensee fails to comply with any of the conditions of the licence, or if the licence was granted without the prior approval in writing of the Permanent Secretary having been obtained.

Storage in bins and pits of class "A" petroleum.

38.—(1) Subject to the requirements of any other enactment and notwithstanding those of these regulations, on application made to it under regulation 44 below, the appropriate authority may license the keeping of class "A" petroleum on premises, or the conveying of such petroleum, and in any such case the following provisions of this regulation, as the case may require, shall have effect.

(2) Possession of such petroleum may be licensed where the petroleum is contained in gas-tight, tinned or galvanized sheet iron, steel or lead plate receptacles fitted with well-made filling holes and well-fitting screw plugs, or fitted with screw caps or other metal air-tight caps, and the receptacles comply with the following, that is to say,—

(a) an air space of at least two and a half per cent of the capacity of the receptacle shall be left in each receptacle at the time of filling ;

(b) all receptacles shall be so substantially constructed and secured as not to be liable to be broken or become defective, leaky or insecure, otherwise than by way of inevitable accident or criminal negligence ;

(c) the nature of the contents and the words "highly flammable" shall be distinctly marked on all receptacles ;

(d) the receptacles shall be kept in iron bins at least one-sixteenth of an inch thick, or in concrete bins or in concrete masonry or bricklined cement-faced pits ;

(e) the bins or pits shall be substantially constructed to the approval of the appropriate authority ;

(f) the bins or pits shall be provided with a ventilation pipe at least one inch in diameter adequately protected by two non-corrodible wire gauze diaphragms, communicating with the open air at least ten feet from the ground and either at least ten feet from any door, window, chimney or exhaust pipe, or above the roof ;

(g) the door opening of such bins or pits shall be at such height that the portion below the opening can contain five per cent in excess without flow therefrom of the quantity of petroleum allowed to be stored therein ;

(h) not more than five hundred gallons of the petroleum shall be kept in any such bin or pit except when it is desired to keep the petroleum on the premises in metal drums of capacities of not less than forty gallons and of not more than sixty-five gallons, for the purpose of distribution therefrom by means of approved appliances, and in any such case one such metal drum for each such approved appliance shall be allowed to be kept on the premises outside any such bin or pit ;

(i) a bin or pit shall be at least twenty feet from the nearest part of any other bin or pit on the same or on other premises ;

(j) if the bins or pits containing the receptacles of such petroleum are enclosed in buildings, the buildings themselves shall be protected by an efficient lightning conductor.

(3) In the case of receptacles to which this regulation applies at no time are they to be filled or replenished with class "A" petroleum on the premises, nor shall the contents of any such receptacles be exposed in the presence of fire or artificial light (except such light and fittings of the construction, position and character described in regulation 36 (1)(j) as are not liable to ignite any flammable vapour arising from such petroleum), and no fire or artificial light capable of igniting flammable vapour shall be brought within dangerous proximity to the place where any receptacle containing this class of petroleum is kept.

(4) Any licensee to whom a licence is granted under paragraph (1) of this regulation shall in respect of any class "A" petroleum conveyed or kept by him or on his behalf in his vehicles or on his premises, direct—

(a) all persons concerned to take proper precautions for the prevention of accidents by fire or explosion and for the prevention of unauthorised persons from having access to any class 'A' petroleum so kept or conveyed, or to receptacles which have contained or were or are intended to contain any such petroleum,

(b) every person managing or employed on or in connection with any garage, store, bin, pit or other receptacle where or in which any such petroleum is kept—

(i) to abstain from smoking and from the doing of every other act, not reasonably necessary which is liable or tends to cause fire or explosion, and

(ii) to prevent any other person from doing or committing any such act,

(c) the display, in a conspicuous position on the premises where such petroleum is kept or stored, in letters of at least six inches in height, of notices forbidding smoking.

(5) The provisions of this regulation shall, with such modifications as the case may require, apply to the conveyance of class "A" petroleum as they apply to its storage thereon.

(6) In the application of this regulation—

(a) at least one extinguisher of an approved type, and supplies of not less than seven hundredweight of sand or dry earth shall be kept on the premises so as to be readily available for use in case of fire and the extinguisher and the supplies shall be maintained in the condition necessary or suitable as the case may be, for the intended purpose ;

(b) petroleum shall not be allowed to escape into any inlet or drain communicating with a sewer ; and

(c) no person shall repair or cause to be repaired any receptacle, bin or pit in which to his knowledge, any class "A" petroleum is or has been kept, until he has taken all reasonable precautions to ensure that the receptacle, bin, or pit is free from this class of petroleum, and from any flammable vapour occasioned by that class of petroleum ;

(d) the precautions to be taken for prevention of fire or explosion in the Federal territory shall be such as satisfy the Federal Fire Commissioner.

39.—(1) Where on application made to the appropriate authority for permission to store petroleum in bulk, plans for such storage are acceptable to the engineer to the appropriate authority and, in respect of the Federal territory, agreed by the Federal Fire Commissioner, and the application is approved in writing by the Permanent Secretary (after consultation in proper case with any town planning authority), the appropriate authority may thereafter grant a licence for the storage of petroleum in bulk. Without prejudice to conditions that may be imposed in any particular case by the appropriate authority, the licence shall be subject to such of the following provisions of this regulation as are applicable.

Storage of
petroleum
in bulk.

(2) If the storage relates to class "A" or class "B" petroleum—

(a) in normal design fixed roof tanks, the minimum distance—

(i) between the perimeter of the tank and the outer body of the installation shall be the diameter of the tank or 50 feet, whichever is the less, but in no case less than 30 feet,

(ii) between tank and tank shall be the diameter of whichever is the smaller, or 50 feet whichever is the less :

(b) in floating roof tanks, the minimum distance—

(i) between the perimeter of the tank and the boundary of the installation, or

(ii) between tank and tank, shall be not less than 20 feet; and for the purposes of sub-paragraph (a) or (b) above—

(c) small tanks shall be considered as one tank if sited together in groups not exceeding a combined capacity of 3,000 water tons, and spaced according to the requirements of the locality and of operational needs.

(3) If the storage relates to liquefied petroleum gas (hereafter referred to as "LPG"), and—

(a) the LPG vessel does not exceed 500 cubic metres, the minimum distance—

(i) from the boundary of the installation ; or

(ii) from open fires ; or

(iii) from class "A" and class "B" petroleum ; shall be 50 feet :

(b) the LPG vessel exceeds 500 cubic metres, the minimum distance—

(i) from class "A" and class "B" petroleum shall be 50 feet ;

(ii) from the boundary of the installation, or of open fires, as the case may be, shall be 75 feet.

(4) Storage tanks shall accord with standards approved by the Director of Federal Public Works, and be designed and constructed from mild steel or other material approved by him, and storage tanks in any event shall be adequately protected from rust and conspicuously marked with their capacity in gallons or barrels as the case may require, and if they are to be exposed to the elements above ground, be painted white or other light colour ; and—

(a) when sited below the surface of the ground, they shall be covered to a minimum depth of 12 inches with allowance made at surface level for manhole covers, and the tanks shall, (if in the event of serious leakage, contamination of water supplies, water courses or any drainage system is probable or likely,) be surrounded with puddled clay not less in thickness than 12 inches, or by fine concrete of a thickness approved by the engineer to the appropriate authority :

(b) when sited wholly or partly above the surface of the ground, they shall be supported by such means as the engineer to the appropriate authority may in writing approve, and be surrounded by a main retaining bund wall :

and in any event, the tanks—

(c) shall be fitted with manholes of a size sufficient to enable easy access to the insides and with vents capable of relieving any excess pressure or vacuum :

(d) shall have access to their roofs by means of a ladder or staircase of a type approved by the Chief Petroleum Engineer, and where a tank is of the class known as floating roof tanks, it shall have an adequate wind girder :

(e) shall be provided with efficient electrical earth connections independent of pipe connections, so however that they shall have an electrical resistance value not exceeding ten ohms measured by an earth resistance tester of the type known as "Megger", or any type of tester of a similar nature designed to measure electrical resistance; and

(f) in the case of fixed roof tanks, an air space of not less than two and one half per cent of their capacity (including the manhole) shall be provided to allow for expansion.

(5) Where tanks are sited below the surface of the ground, the appropriate authority may require the area to be fenced if the position of the tanks is not obvious; and subject thereto—

(a) if the tanks are protected by adequate concrete covering, the licensee may, with the approval in writing of the appropriate authority, use the open space without roof or other covering for the filling of vehicles, and

(b) if the tanks are not protected by concrete covering, the licensee may use the space only for the temporary storage of metallic packages.

(6) Openings in storage tanks (other than vent pipes) shall be air-tight when closed; and pumping mains and pipes shall have affixed or used therewith efficient means of stopping the flow of petroleum in the event of damage to pipelines connected to or used with any storage tank.

(7) Save as to ventilating opening provided, the roof of a storage tank shall be gas-tight; and where there are open vents or pressure and vacuum valves intended for use with a storage tank, they shall be filled in such manner as to prevent any increase in pressure differentials over the appropriate storage tank design maximum, with the vent flow capacity of a size appropriate to cope with variation in volume due to any temperature change likely to be experienced in service, whether occasioned in filling, or discharging or by reason of ullage.

(8) Where tank pits or wells are necessary for the siting of storage tanks under this regulation, they shall not at any time be connected with any drainage, designed or designated for any purpose other than the storage of petroleum.

(9) Where storage tanks are surrounded by a main retaining bund wall, the following provisions shall apply—

(a) the total capacity of the storage tanks shall not exceed 60,000 water tons;

(b) the enclosure shall be capable of containing the contents of the largest storage tank plus ten per cent of the contents of the remaining tanks, and if there is only one tank, the bund wall shall, in the event of any emergency or conflagration, be capable of containing the contents of the tank, unless there are adequate piping facilities approved by the Director of Federal Public Works, to remove them;

(c) there shall be installed in the enclosure, an efficient oil interceptor with an isolating valve;

(d) water shall not be allowed to accumulate within the enclosure or any part thereof where the storage tanks are on concrete foundations and the bed of the enclosure is of concrete, and drainage of the enclosure shall be effected by means of a pipe fitted with a valve, to be kept closed when not in use, which is capable of being actuated outside the enclosure;

(e) intermediate bund walls up to half the height of the main bunds or of a height of two feet, whichever is the less, shall be provided as fire breaks in cases where storage tanks are of a total capacity of 20,000 water tons or more.

(10) In the application of this regulation—

(a) save in any building set apart for offices, soldering shed, laboratory, living quarters, engine room, boiler house or smithy, fires and naked lights shall not be brought to any installation on the site or used in repairing or maintaining storage tanks or equipment or fixtures used therewith ;

(b) the licensee shall undertake in writing to effect prompt repairs to leaks in storage tanks ;

(c) workmen shall not be permitted to enter any storage tank until the concentration of gas is ascertained to be within the margin of safety or that it is free of gas, as the case may be, and thereafter while work is in progress, all feed and vent lines shall be disconnected and blanked off, and storage tank hatches shall be kept open ;

(d) adequate ventilation shall be provided during any periodic cleaning of a storage tank, with frequent tests to be made in the course of the work to check of any increase in gas concentration, and where the concentration exceeds 0.05 per cent—

(i) gas masks shall be worn by persons likely to be affected,

(ii) tools used shall be incapable of causing sparks, and

(iii) hand lamps and torches used shall be approved electrical flame-proof appliances.

40.—(1) In every installation for the bulk storage or handling of petroleum there shall be provided and kept in readiness to the reasonable satisfaction of the Federal Fire Commissioner adequate means designed to extinguish fire.

(2) Each item of fire fighting equipment shall be inspected and tested at appropriate intervals by a competent person appointed for the purpose by the licensee. The date of the last inspection shall be painted on the appliance and the result of the inspection shall be entered in a log book kept for that purpose.

(3) Personnel employed in the installation shall be instructed in the use of each item of the fire fighting equipment.

(4) Instructions to personnel in case of fire shall be clearly and concisely expressed and prominently displayed.

(5) "No Smoking" signs shall be posted as needed in the installation.

(6) Whenever a fire occurs in an installation a report of the circumstances and probable cause shall be forwarded by the licensee to the Federal Fire Commissioner and to the Chief Petroleum Engineer within forty-eight hours of the occurrence.

41.—(1) No filling shed shall be used for any purpose other than the washing, cleaning and filling of petroleum containers.

(2) No filling shed shall be under the same roof as a storage shed unless they are separated by a wall of metal sheeting, masonry or concrete :

Provided that the wall may have in it a doorway giving direct communication between the storage shed and the filling shed, if the doorway be such as to enable it at all times to be closed immediately by a fireproof door.

Adequate
fire fighting
measures.

Filling
sheds.

Soldering
filled tins.

42.—(1) The soldering of filled tins shall not be carried out in the filling shed but shall be done in a separate building not less than fifty feet distant therefrom, or in an area separated by a wall of metal sheeting, masonry or concrete.

(2) The soldering irons, unless electrically heated, shall be heated in a separate compartment from that in which the soldering takes place.

(3) Fires used for heating soldering bolts shall be at least three feet above ground level.

(4) The opening between the two compartments through which the soldering irons are passed shall be at a height of not less than three feet from the ground and shall be provided with an iron shutter which can be lowered at once.

43.—(1) Any officer deputed by the appropriate authority or any officer authorised by the Chief Petroleum Engineer or any police officer not below the rank of inspector may, at any time between sunrise and sunset, enter any premises in respect of which a licence to store petroleum has been granted and inspect the same.

Entry for the
purpose of
inspection.

(2) Any officer deputed by the appropriate authority or any officer authorised by the Chief Petroleum Engineer or any police officer mentioned in paragraph (1) above may, on such entry, require any licensee to show him any of the receptacles, bins or tanks in which any of the petroleum in his possession is stored or contained, to give him such assistance as he may require for examining the same and to deliver to him a sample or samples from any of the receptacles, bins or tanks.

44.—(1) Every application for a licence to store petroleum shall be submitted to the appropriate authority in writing and shall be accompanied by a plan drawn to scale, showing the site of the installation and the design of the storage shed or tanks in all respects in sufficient detail to enable the project to be fully understood.

Application
for licence.

(2) Application for licences to store petroleum shall specify—

(a) the description and quantity of petroleum which the applicant desires to store, and the manner in which it is proposed to store it ;

(b) the name and position of the premises in which it is proposed to store the petroleum and whether the said premises fulfil the conditions required by regulations 36 and 39 in so far as they are applicable to the installation ;

(c) the total amount of petroleum proposed to be stored in each building which it is proposed to erect.

45. Every licence to store petroleum shall expire on the 31st day of December of the year in which it is issued, except in the case of a licence to store petroleum in bulk which may with the approval of the Permanent Secretary be issued for such longer period as he may think fit.

Duration
of licence.

46. Every application for the renewal of a licence to store petroleum shall be made in the same manner as an application for an original licence, except that a plan need not be submitted, and the application shall be made not less than thirty days, or such longer period as the appropriate authority may decide, before the day on which the original licence expires.

Renewal of
licences.

47. When a licence is necessary to authorise a person to store petroleum there shall be charged for such licence and for each renewal of such licence a fee according to the table set out below calculated either on the maximum amount of petroleum which the licensee desires to store at any one time or the maximum capacity of the containers to be used by him for containing the petroleum whichever is the greater:—

(a) Class "B" Petroleum

	£	s	d
(1) Exceeding 200 gallons but not exceeding 500 gallons ..	1	0	0
(2) Exceeding 500 gallons but not exceeding 5,000 gallons ..	5	0	0
(3) Exceeding 5,000 gallons, for each 5,000 gallons, or part thereof : provided that no licence fee shall exceed £200	5	0	0

(b) Class "A" Petroleum

	£	s	d
(4) Exceeding			
(i) 46 gallons if kept in tins or other small containers, such containers not capable of containing more than 46 gallons ; or	2	0	0
(ii) 92 gallons if kept in drums, such drums not capable of containing more than 46 gallons each ; or			
(iii) 138 gallons if kept otherwise			

(c) Both Class "A" and Class "B" Petroleum

	£	s	d
(5) Not exceeding 200 gallons in all, but of which class "A" petroleum exceeds 138 gallons	2	0	0
(6) Exceeding 200 gallons in all, but not exceeding 5,000 gallons	5	0	0
(7) Exceeding 5,000 gallons in all for each 5,000 gallons or part thereof: provided that no licence fee shall exceed £200	5	0	0

B.—Storage in Government Petroleum Stores

Government
petroleum
store.

48.—(1) The provisions of this regulation and regulations 49, 50, 51, 52 and 53 shall apply to storage of petroleum in government petroleum stores.

(2) When government petroleum stores are established at any port an engineer appointed by the Chief Petroleum Engineer shall be responsible for seeing that the general regulations governing the storage of petroleum are complied with in the store.

(3) When import entries have been passed, consignment of petroleum may be received into the store.

(3) The store shall be opened for the receipt and delivery of petroleum on Saturdays from 7 a.m. to 12.30 p.m. and on other days (excepting Sundays and public holidays) from 7 a.m. to 12.30 p.m. and from 2.30 p.m. to 4.30 p.m. :

Provided that on payment of the overtime fees prescribed under the Customs and Excise Management 1958 Act, the store may be opened on any day between sunrise and sunset at the request of any person.

1958 No. 55.

49.—(1) The following rental shall be paid in respect of petroleum stored in a government petroleum store :—

Rents in government petroleum store.

(a) When the petroleum is in cases containing not more than eight and a third gallons, or is not packed in cases, for each ten gallons or part thereof.

Up to, and including the last day of the calendar month in which the storage commences..... 1d

Thereafter for each of the three next succeeding calendar months or part thereof..... 1d

Thereafter for each of three succeeding calendar months or part thereof.... 2d

Thereafter for each calendar month or part thereof..... 3d

(2) Such rental shall be paid to the Collector of Customs and Excise monthly in advance, and if not paid may be sued for by such Collector.

50. An account of the receipts of petroleum into a government petroleum store shall be taken, and after the examination of each consignment is completed the storekeeper of the store shall transmit to the Collector of Customs and Excise a certificate in the following form :—

Accounts of receipts of petroleum into government petroleum store.

PETROLEUM CERTIFICATE

I certify that the consignment of.....
ex ss.....received on.....and
consigned to.....has been
examined with the following results.

Class "A"

Class "B"

Good.....

Leaking.....

Used for filling.....

Empty.....

Storekeeper

Owner

51. Each consignment of petroleum is to be stored separately in a government petroleum store and a label affixed thereto showing the date of receipt, the names of consignee and importing ship.

Separate storage of each consignment.

Delivery of petroleum.

52. Deliveries of petroleum are to be made on delivery orders signed by the owner, and no delivery shall be allowed until rent is paid.

Loss in respect of petroleum received into government petroleum stores.

53. No compensation shall be made to any importer, owner or consignee of any petroleum received into a government petroleum store by reason of any damage occasioned thereto by any natural or accidental cause, or for loss by theft or other unauthorised removal, but if such petroleum shall be embezzled or stolen by, or by means of the connivance of, any officer in the service of the Government of the Federation, and such officer is prosecuted to conviction for the offence, whether by the importer, owner or consignee or any other person authorised by law, the value of such petroleum, together with any duties of customs paid thereon, shall, on the approval of the Permanent Secretary, be paid or made good to such importer, owner or consignee.

PART III.—TRANSPORT OF PETROLEUM

Prohibition of transport without licence.

54. No person shall transport petroleum in bulk otherwise than under and in accordance with a licence issued under this Part.

Licence for transport.

55.—(1) (a) Licences for the transport of petroleum in bulk by means of pipeline may be granted by the Permanent Secretary and shall be in Form G in the Schedule and shall be subject to the conditions specified therein.

(b) The applicant for a licence shall furnish the Permanent Secretary with a copy of the proposed rules for the operation of the pipelines and shall satisfy him that the proposed pipelines can at all times be operated with safety and in accordance with the Act and the regulations made thereunder.

(c) The fee payable for a licence to transport petroleum in bulk by means of a pipeline under these regulations shall be five pounds.

(2) For the purpose of this regulation the pipelines referred to shall be for the purpose of transporting petroleum from a port where it is unloaded to the nearest bulk installation or from a refinery to a jetty or loading point.

Issue of licence.

56.—(1) Licences for the transport of petroleum in bulk otherwise than by pipelines shall be issued by the harbour master, or an officer authorised by him in that behalf if the transport is by water, or by an appropriate authority if the transport is by land; and shall be in Form H or I in the Schedule and shall be subject to the conditions specified therein:

Provided that in the case of a licence in Form I, for the transport of petroleum in bulk by road, the licensing officer shall delete such of the conditions specified in Form I as are inconsistent with the provisions of these regulations.

(2) The fee for a licence to transport petroleum in bulk otherwise than by pipeline shall be five pounds.

Security measures against breakage.

57.—(1) Class "B" petroleum not in bulk shall be conveyed in air-tight tins or drums of steel or iron or other receptacles not easily broken, or in bottles securely stoppered and carefully packed so as to avoid risk of breakage.

(2) Class "A" petroleum not in bulk shall not be conveyed except it is contained in receptacles and packed in accordance with the following requirements:—

(a) Class "A" petroleum shall be contained in gas-tight tinned or galvanized sheet-iron, steel, or lead plated receptacles each containing not more than seventy gallons and fitted with well-made filling holes and well-

fitted screw plugs, or fitted with screw cap or other cap with metal air-tight undercap. The receptacles shall be packed in strong wooden cases, the thickness of the wood to be not less than three-eighths of an inch.

(b) Such receptacles shall be constructed and secured as not to be liable, except in circumstances of grave negligence or extraordinary accident, to be broken or become defective, leaky or insecure.

(c) Such receptacles or cases shall be marked as directed in regulation 21.

(d) An air space of at least two and a half per cent or its capacity shall be left in each receptacle at the time of filling :

Provided that this regulation shall not apply to the conveyance in a motor vehicle of petroleum to be used as fuel in such vehicle.

58. Persons engaged in the conveyance of petroleum not in bulk shall take due precaution for preventing the packages or receptacles from becoming damaged in the course of conveyance and for preventing any damage or danger to any person or property, and shall abstain from any act which tends to cause fire or explosion and which is not reasonably necessary, and shall use every reasonable endeavour to prevent any other person from committing any such act.

Precaution
against
damages.

59. Lidless cases of petroleum may be transported by rail subject to the following conditions :

Condition
for trans-
porting
lidless
cases by rail.

(a) Railway steel wagons only shall be used.

(b) Layers of matting or other suitable dunnage shall be placed on the floor of the wagon.

(c) Layers of matting or other suitable dunnage shall be placed between each tier or lidless cases.

(d) Layers of matting or other suitable dunnage shall be packed between the outer rows of lidless cases and the sides of the wagon to ensure that the cases are safely and tightly packed and will not be damaged, and that the tins of petroleum therein contained will not be damaged, pierced, dented or punctured during transit.

(e) Each wagon shall be so loaded as to prevent movement of the cases in transit.

(f) The cases shall be packed in complete tiers on an even plane.

(g) Each tier shall consist of complete rows along the entire length and breadth of the wagon.

(h) The level of the topmost tier shall not exceed the lowest height of any of the sides of the wagon.

(i) At least two wagons containing non-flammable goods shall in every railway train transporting cases of petroleum be attached between the railway engine and any wagon loaded with cases of petroleum.

(j) Passenger coaches and wagons loaded with cases of petroleum shall not form part of one railway train except in exceptional circumstances and only if authorised in writing by the General Manager of the Nigerian Railway Corporation.

(k) No case of petroleum containing any punctured, leaky, or badly damaged tin shall be loaded into any railway wagon.

(l) The General Manager of the Nigerian Railway Corporation, or any person authorised by him, may refuse to accept cases of petroleum for transit by rail unless they are packed to his satisfaction and in accordance with these conditions.

(m) Cases of petroleum shall not be loaded or unloaded between sunset and sunrise : Provided that the General Manager of the Nigerian Railway Corporation may permit loading where flood lighting or adequate and safe electric illumination is available.

(n) Notices strictly forbidding smoking, the carrying of matches and unprotected lights within sixty feet of a wagon loaded with cases of petroleum shall be conspicuously painted or displayed on the wagon.

(o) No unauthorised person shall be permitted to ride on the wagon. Smoking and the use of naked lights are strictly forbidden within sixty feet of the wagon. The wagon shall not be halted within sixty feet of a fire or open flame.

(p) The guard's van of all trains transporting petroleum shall at all times be supplied with a fire extinguishing appliance of a type suitable for fighting a petroleum fire, ready and available for immediate use in case of fire.

60. Tins of petroleum may be transported by road on motor lorries subject to the following conditions :—

(a) The motor lorry shall be fitted with three permanent sides and tailboard. The tailboard shall be attached to the rear of the lorry by strong hinges, and shall be so constructed as to be capable of being securely fastened in a vertical position after the lorry is loaded.

(b) When the floor of the lorry is not of timber it shall be fitted with a wooden tray which shall be so constructed as to protect the tins from any damage, puncture, piercing or denting.

(c) Layers of matting or other suitable dunnage shall be placed on the bottom of the wooden tray.

(d) Layers of matting or other suitable dunnage shall be packed between the outer rows of tins and the sides of the lorry to ensure that the tins are safely and securely packed and that they will not be damaged, punctured, pierced or dented either during transit or owing to the construction or condition of the lorry.

(e) Each lorry shall be loaded with complete tiers packed on an even plane.

(f) Each tier shall consist of complete rows along the entire length and breadth of the tray.

(g) The level of the topmost tier shall not exceed the lowest height of any of the sides or the tailboard of the lorry.

(h) No punctured, leaky or damaged tin shall be loaded on any lorry.

(i) Tins of petroleum shall not be loaded or unloaded between sunset and sunrise.

(j) The lorry shall not be driven on any road between sunset and sunrise.

(k) The lorry shall be loaded under the surveillance of a competent person and shall not be unloaded except under the supervision of an agent of the consignee and at a depot of the consignee.

(l) The lorry shall at all times be in charge of a competent person or persons authorised by the owner. Not more than three persons (including the driver) shall travel in a vehicle transporting tins of petroleum.

(m) Smoking or the use of naked lights shall not be permitted on or in the vicinity of the lorry. The lorry shall not be driven or halted within sixty feet of a fire or open flame.

Transport of
tins of
petroleum by
road on
motor lor-
ries.

(n) The lorry shall have affixed to each side and to the tail end of it a notice board on which shall be conspicuously painted in bright letters the words "Highly Flammable". The board shall be so placed as to be easily visible to persons approaching the lorry.

PART IV—OPEN AIR STORAGE OF PETROLEUM

Meaning
of approved.

61.—(1) In this Part unless the context otherwise requires, "approved" means approved by an officer appointed by the appropriate authority or the Chief Petroleum Engineer or such officer deputed by him for the purpose.

(2) The provisions of this Part shall apply to open air storage of petroleum.

Storage in
open air
premises.

62.—(1) Notwithstanding anything in these regulations but subject to any other laws, an appropriate authority may grant a licence for keeping any quantity of petroleum on premises in the open air in metal drums of not less than forty-four gallons and of not more than sixty-five gallons for the purpose of storage.

(2) Every application for a licence to store petroleum in premises in the open air shall be in writing and shall be accompanied by a plan drawn to an approved scale showing the site of such premises and the surrounding enclosure and the relation of the site to the highways and adjoining properties in sufficient detail to enable the project to be understood.

(3) The application shall be submitted to the licensing officer.

(4) Such application shall specify :—

(a) the description and quantity of petroleum which the applicant desires to keep, and the manner in which it is proposed to store it ;

(b) the name and position of the premises on which it is proposed to keep the petroleum and whether the said premises fulfil the conditions required by these regulations ;

(c) the total amount of petroleum proposed to be kept in each enclosure.

Drums for
storage of
petroleum.

63.—(1) Drums may be placed upon the ground or may be supported on some approved floor (which shall not be made of wood in municipalities) and the area in which they are stored must be surrounded by walls of brick, stone, cement or an approved embankment, not less than three feet high or if necessary of such greater height as will at all times ensure that the enclosure so formed is capable of retaining the total quantity of petroleum to be stored in the event of its escape from the entire number of drums in which it is contained.

(2) The drums in the storage enclosure shall be arranged in such a manner that easy access to within twelve yards is available to any part of the storage enclosure to enable efficient use of extinguishers to be made in case of fire.

(3) Where in the event of a serious leakage there is a possibility of water supplies, water courses or drainage systems adjacent to the premises being contaminated, the floor of the enclosed storage area must be formed of concrete or of such other material as is approved by the Engineer to the appropriate authority.

(4) A clear space of at least twelve feet in width must be left between such enclosures and protected works and between such enclosures and the boundaries separating adjoining plots.

(5) There shall be a space of at least fifty feet between storage enclosures and sidings on which working locomotives pass.

(6) An air space of at least two and half per cent of the capacity thereof shall be left in each metal drum.

(7) All leaks in drums shall be promptly repaired.

(8) Drums must be adequately protected from rust and must be painted.

(9) Nothing in this regulation shall apply to the storage of drums in a bulk petroleum installation licensed for the storage of petroleum in bulk under regulation 39.

Fire fighting equipments.

64.—(1) There shall be kept in such places and in such manner as shall be approved, ready and available for use in the enclosed area in case of fire :—

(a) a sufficient supply of sand or dry earth ;

(b) an adequate number of fire extinguishers of an approved type ;

(c) buckets or containers and scoop shovels, to the satisfaction of the Federal Fire Commissioner.

(2) Such sand, earth and other fire fighting appliances shall at all times be maintained in a condition suitable for their intended immediate use.

Escape into sewer.

65. Petroleum shall not be allowed to escape into any inlet or drain communicating with a sewer.

Drums stored in open air.

66. The appropriate authority may require the provision of a fireproof roof over drums stored in the open air where special conditions exist such as a danger from sparks.

Draining of enclosed areas.

67. All enclosed areas, when the entire floor thereof is of concrete or of non-porous material shall be drained by pipe fitted with a valve actuated from the outside of the enclosure. Such valve shall always be kept closed except when actually in use. No water shall be allowed to accumulate in the enclosure.

Other conditions.

68. The appropriate authority may impose such other conditions as may be required in any particular case.

Application of certain regulations.

69.—(1) The provisions, conditions and stipulations contained in the regulations mentioned in paragraph (2) of this regulation shall apply to the storage of petroleum on premises in the open air as they apply to storage of petroleum in receptacles to which those regulations apply.

(2) The said regulations are regulations 38(2) (a) to (d), (3) and (4) 43, 44, 45, 46, 101 and 102 of these regulations.

PART V—TRANSPORT OF PETROLEUM IN BULK ON FEDERAL TRUNK ROADS OUTSIDE THE FEDERAL TERRITORY AND ON ALL ROADS IN THE FEDERAL TERRITORY

Petroleum to be carried in tank vehicles.

70.—(1) The provisions of this Part shall apply to the transportation of petroleum in bulk—

(a) on federal trunk roads outside the Federal territory ;

(b) on all roads in the Federal territory.

(2) No person shall carry petroleum in bulk by road except in a tank vehicle which complies with the provisions of this Part.

(3) No person shall tow a trailer behind a tank vehicle licensed for the carriage of petroleum products, unless a permit has first been obtained from the Permanent Secretary for the use of such a trailer on routes to be specified. Such a permit will not be valid on routes other than those specified. If the trailer is to carry class "A" petroleum in bulk, the construction of the trailer and of the tank fittings must comply with the regulations covering tank vehicles and their fittings on self propelled bulk vehicles.

Maintenance and construction of tank vehicle.

71.—(1) A tank vehicle shall be maintained in good condition and have the words "Highly Flammable" conspicuously placed on the rear end of the tank in letters in contrasting colours not less than four inches high.

(2) An air space of at least two and a half per cent of a tank's total capacity shall be left in a tank when filled with petroleum.

(3) The body of a tank vehicle, including its fittings shall be strongly constructed of fire-resisting materials. Timber will not be considered as a fire-resisting material except when used for tank mountings.

(4) The tank, if not a component part of the frame of the vehicle, shall be securely attached thereto.

(5) A tank vehicle shall be earthed at all times by means of a dragging chain or other device approved by the Chief Petroleum Engineer.

Separate compartment in tanks.

72.—(1) When the capacity of a tank exceeds 1,200 gallons the tank shall be divided into self contained compartments.

(2) No one compartment shall contain an amount of petroleum exceeding 1,200 gallons.

(3) A compartment the capacity of which exceeds 700 gallons shall be fitted with baffle plates in such a manner that all possibility of excess surge is eliminated.

Engine requirements.

73.—(1) The engine, fuel tank and electric batteries of a tank vehicle shall be effectively screened from the tank by a fire-resisting shield carried down to within fourteen inches of the ground and upwards to the level of the top of the tank, or if the roof of the cab is of fire-resisting construction and is without an opening, to the level of the top of the cab.

(2) A space of not less than six inches between the tank and the fire-resisting shield shall be left clear and unobstructed except for any part of the frame work or valances used to screen the sides of the tank: Provided that—

(a) the end of such valances shall be insulated from the shield by a layer of heat-resisting material; and

(b) the valances shall not be turned inwards so as to obstruct the space between the tank and the shield.

(3) Notwithstanding the provisions of paragraph (1) above—

(a) the fuel tank of a vehicle may be situated behind the shield if—

(i) a fuel apparatus fixed in front of the shield is used to lift the contents from the fuel tank; and

(ii) the fuel tank is protected by the frame or by stout steel guards and the filling hole cover is provided with a lock;

(b) the fuel tank of a vehicle may be behind the shield if the fuel used in the engine does not give off a flammable vapour at a temperature of less than one hundred and fifty degrees Fahrenheit.

(4) Notwithstanding the provisions of paragraph (1) above, the electric batteries of a vehicle may be situated behind the shield if the batteries are encased in fire-resisting material and are adequately ventilated and the terminals are securely fastened.

(5) The entire exhaust system of a tank vehicle shall be in front of the shield.

(6) A quick action cut-off valve shall be fitted to the engine fuel feed pipe in an accessible position, which shall be clearly marked:

Provided that this paragraph shall not apply to a vehicle in which a gravity feed tank is not incorporated in the fuel feed system and the fuel feed pump is driven directly from the engine of the vehicle or by electricity with a cut off switch.

Filling pipes.

74.—(1) When a tank vehicle is equipped with one or more filling pipes each filling pipe shall be carried down as near as may be to the bottom of the tank so that it provides at all times a liquid seal at the bottom of the pipe.

(2) The ventilating openings, if separated from the pipes, shall be covered with fine wire gauze of not less than twenty-eight meshes to the linear inch:

(3) The draw-off pipes shall be fitted with strong and secure valves and screw or equally efficient caps and, save where a syphon system of emptying the tank is used, with internal valves.

(4) Valves at the rear of the vehicle and valves at the side of the vehicle shall be enclosed in a strong locked box of suitable material or be provided with and protected by stout steel guards.

(5) All faucets of tank vehicles shall be made of non-sparking metal and fitted with drip caps.

Control of tank vehicles.

75.—(1) Tank vehicles shall be in the charge at all times of a competent person employed by the licensee.

(2) No unauthorised person shall be permitted to ride on the vehicle, and no load other than package petroleum products shall be carried on the vehicle or separately in a trailer.

(3) The licensee of a vehicle used for the conveyance of petroleum spirit who employs any person in connection with such conveyance shall furnish a copy of these regulations to, or affix a copy thereof in some place where it can be conveniently read by any such person and shall take all other measures necessary to ensure that any such person is acquainted with and carries out the provisions of these regulations.

Precautions against fire.

76.—(1) Smoking and the use of naked lights shall not be permitted within sixty feet of a tank vehicle.

(2) The tank vehicle shall not be halted within sixty feet of a fire or open flame.

(3) No matches, mechanical cigarette lighter, or other means of making fire shall be carried either on the tank vehicle or by any person on the vehicle.

(4) No can, drum, or other vessel containing petroleum spirit shall be carried separately between the cab and the tank of the vehicle.

(5) An approved type of fire extinguisher shall be carried in an easily accessible position on every vehicle conveying petroleum spirit. All fire extinguishers shall be of approved quality, checked and fitted with a quick release device.

(6) No repairs involving the use of naked lights shall be carried out unless the tank is emptied and a gas-free certificate obtained from a responsible representative of the owners.

Pipes to be kept closed.

77.—(1) Except during the filling or discharging into the tank, the filling pipe or manhole of a tank vehicle shall at all times be kept securely closed.

(2) Except during the filling or emptying of the tank, the dipping pipe of a tank vehicle shall at all times be kept securely closed.

(3) The fuel tank of a mechanically propelled vehicle shall not be filled or replenished with class "A" petroleum direct from a vehicle carrying class "A" petroleum in bulk.

78.—(1) No tank vehicle shall be parked on the highway.

(2) Where a mechanical breakdown, or other cause, prevents a vehicle from leaving a highway, the driver shall remain with the vehicle and take all reasonable precautions to prevent a fire or other accident. In particular, he shall see to it that :—

(a) two collapsible metal notice boards each bearing the word "DANGER" in red reflector glass are placed in the centre of the road, fifty yards ahead of, and fifty yards behind, the standing vehicle ;

(b) one red lamp is placed beside each of the boards mentioned in sub-paragraph (a) above during the hours of darkness ;

(c) the fire extinguisher on the vehicle are removed, if necessary, and placed where they may be readily available if the vehicle catches fire.

(3) The breakdown must be reported to the Police as soon as possible.

79. The Chief Petroleum Engineer or the appropriate authority may, by the issue of a permit, exempt any vehicle specified in the permit from complying with all or any of the provisions of this Part in respect of one journey specified in the permit.

80.—(1) The premises in which a tank vehicle is usually kept shall be maintained in a clean condition, free from grass, weeds and all flammable material of any description.

(2) Approved type fire extinguishers shall be kept on such premises and maintained at all times in readiness for immediate use.

(3) Notices prohibiting smoking, the lighting of matches and the carrying of unprotected lights shall be fixed in a prominent position in and about such premises.

81. The licensee shall ensure that :—

(a) the premises where the tank vehicle is kept are secured in such a manner as to prevent the unlawful entry of any person ; and

(b) the vehicle, when garaged on the premises, is protected against interference by an unauthorised person.

82. An officer authorised by the appropriate authority, or by the Chief Petroleum Engineer, or a police officer not below the rank of Inspector may, upon production of evidence of identity, enter any premises, where a tank vehicle is usually kept, for the purpose of inspecting such tank vehicle or the premises, or both such vehicle and premises.

83. A tank vehicle may be parked in a suitable open space or in a yard or building.

84.—(1) When loading or unloading a tank vehicle adequate earthing connexion from such vehicle shall be made by bonded hose or other means before commencing the operation.

(2) Such earthing connexion shall not be disconnected until the operation ceases.

(3) The engine of such vehicle shall be stopped before making such earth connexions and shall not be restarted until such earth connexions are disconnected :

Parking of tank vehicles on highway forbidden.

Special permits.

Garaging of tank vehicles.

Protection against theft.

Inspection of tank vehicles and garages.

Places where tank vehicles may be parked.

Safety precautions when loading and unloading.

Provided that this paragraph shall not apply where such vehicle is provided with self-pumping equipment driven by a power take-off or a separate power unit which has been approved by the Chief Petroleum Engineer.

Unloading must be into approved storage tanks.

85.—(1) No unloading of petroleum from any tank vehicle shall take place otherwise than into a licensed storage tank.

(2) (i) The provisions of this regulation shall have effect in relation to the transfer of petroleum from the tank of a tank vehicle into a storage tank.

(ii) For the purpose of distinguishing any storage tank from any other such tank on the same premises every such tank shall be clearly marked by or on behalf of the person licensed under the Act, to keep petroleum in the tank (hereafter in this regulation referred to as "the licensee") with a particular number, and the grade of petroleum contained in the tank shall also be marked thereon, in such manner that the markings cannot be readily altered or obliterated.

(3) Every dipstick, not being one permanently fixed to a storage tank, and any other device used for ascertaining the quantity of the petroleum spirit for the time being contained in a storage tank, shall in a like manner be marked by or on behalf of the licensee with the same number and grade as that with which the storage tank in connection with which it is used is marked.

(4) Where the method of filling a storage tank is by means of a pipe leading from the tank to a filling point not situated on, or immediately adjacent to, the tank itself, the said pipe shall in the like manner be clearly marked by or on behalf of the licensee, on or near the filling point, with the same number and grade as that with which the tank is marked.

(5) Before delivery of petroleum spirit into a storage tank is begun, the licensee shall secure that some competent person who is not the driver of, or any other person employed to be in attendance on, the vehicle from which the delivery is to be made, is in charge of the storage tank for the purpose of the delivery.

(6) The person in charge of a storage tank shall so far as possible ensure that no petroleum overflows from the storage tank or escapes at the filling point and the tank, and in particular, but without prejudice to the generality of the foregoing provisions of this regulation, shall not permit delivery into that tank to begin :

(a) unless that tank has immediately before been tested with a dipstick or other suitable device and the test has shown that the quantity of petroleum proposed to be delivered can safely be received by that tank ;

(b) in any case where the method of filling the tank is that referred to in paragraph (4) of this regulation, until he has taken all reasonable steps to secure that the connecting hose through which the petroleum will be delivered is properly and securely connected to the filling point of that tank, and that so far as can be ascertained, all pipes through which the petroleum will pass between the filling point and the tank are properly connected to each other, or as the case may be, to the tank, and are otherwise in good order, and in any other case until he has taken all reasonable steps to secure that the said connecting hose is properly and securely connected to the filling point of the tank ; and

(c) in any case where there is a dipping opening in the storage tank, until the dipping opening has been securely closed, except in a case where the dip and fill pipe are combined.

(7) Proper records shall be kept of all deliveries into every storage tank.

(8) During the whole time of delivery into any storage tank, the person in charge thereof shall keep a constant watch thereon.

(9) During the whole time of delivery from any vehicle the person attending that vehicle shall keep constant watch on the tank of the tank vehicle from which petroleum is being delivered.

PART VI.—LIQUEFIED PETROLEUM GASES

86. In this Part of these regulations the precautions to be observed in the handling and storage of liquefied petroleum gases are additional to those in any other regulations relating to class "A" petroleum and such other regulations shall be read accordingly.

Additional precautions.

87.—(1) Subject to the prior approval in writing of the Permanent Secretary, the appropriate authority may issue licences for the importation of liquefied petroleum gases and for their storage at bulk installations and depots.

Licences for importation of liquefied gases.

(2) No liquefied petroleum gases may be imported, and no bulk installations or depots for such gases may be operated, without such a licence.

(3) All such licences shall expire on the 31st December of the year in which they are issued.

88.—(1) Tanks for the storage of liquefied petroleum gases shall be designed for a working pressure corresponding to the vapour pressure at the highest temperature that the contents of the tanks are likely to reach.

Storage of liquefied petroleum gases.

(2) The storage tanks shall be fitted with one or more spring-loaded pressure relief valves which communicate directly with the vapour spaces of the tanks and the total discharge capacity of the pressure relief valves on each storage tank shall be such that it limits the pressure inside the tank to 120 per cent of the design pressure under any conditions.

(3) A shut-off valve shall not be installed between a pressure relief valve and storage tank, except in cases where two or more relief valves are fitted to one tank and the shut-off valves are interlocked so that when one is shut the other is fully open and in any such cases the discharge capacity of the relief valve or valves open to the tank shall meet the requirements of paragraph (2) of this regulation. If it is found impracticable to interlock shut-off valves as in the case where safety relief valves may be locked in the open position by means of padlocks, the keys of the padlocks shall be retained by a responsible member of the staff who shall ensure that only one shut-off valve is closed at one time.

(4) All safety valves shall be fitted with vent pipes discharging vertically upwards at a minimum height of 6 feet above the tank top. The vent pipes shall be fitted with loose-fitting rain caps and be drained at the bottom, the drain holes being located so as not to permit impingement of vapour or liquid on the surface of the storage tank.

(5) Each storage tank shall be fitted with a pressure gauge and devices for measuring the liquid content and its temperature. The maximum quantity of liquefied petroleum gas filled into any one tank shall be such that at the maximum operating temperature it will not occupy more than 98 per cent of the capacity of the storage tank.

(6) Drain-cocks or other shut-off valves which communicate direct with the outer atmosphere shall be fitted with caps or blank flanges in which a hole having a maximum diameter of $\frac{1}{2}$ inch shall be drilled, thereby restricting the flow from the valve and minimizing the danger caused by careless operation.

(7) Storage tanks shall be painted in light colours.

(8) No storage tank shall be filled with liquefied petroleum gas having a vapour pressure greater than that of the petroleum product for which the tank is designed.

Pipes and fitting.

89.—(1) Pipeline layouts for use with storage tanks shall be suitably constructed according to recognized practice, with pipelines, valves and pipe fittings conforming to sound engineering practices and cast iron valves and fittings shall on no account be used.

(2) Where it is possible for any liquefied petroleum gas in its liquid phase to be trapped between two valves, a pressure relief valve shall be fitted, notwithstanding that the space between the valves may be equipment such as a pump casing of a meter.

(3) Excess flow valves shall be fitted as necessary to prevent the loss of liquefied petroleum gases from storage tanks and transport tanks, and especially to protect points where flexible hoses are used.

(4) Remote controlled hydraulically operated shut-off valves shall be fitted to each storage tank.

Container filling sheds.

90.—(1) Containers shall be filled with liquefied petroleum gases only in buildings reserved exclusively for these products. The floors of such buildings, which shall have a non-sparking surface, shall be at ground level or raised platform height.

If raised to platform height, the space under the platform may be left open on all sides to allow free ventilation or may be filled in. The space, if left open, shall not be used for any purpose other than ventilation and shall be kept free from rubbish. Pits in the floor shall be filled in solid to obviate the danger of gas accumulation and drains shall be provided with a gas-liquid separator situated outside the building.

(2) Filled containers shall not be stored in the container filling bay. If it is essential that the same structure be used for storage and filling, fire proof wells shall be installed to separate the two operations.

(3) Container filling operations shall be carried out at least 75 feet from any open fire and not less than 50 feet from any storage tanks and installation boundary, or in respect of any other petroleum product at the like distance from any filling shed or storage shed.

Containers.

91.—(1) The quantity of liquefied petroleum gas to be filled in any container shall not occupy more than 95 per cent of the total capacity at a temperature of 65 degrees centigrade or 150°F.

(2) All containers shall be completely emptied before refilling.

(3) After filling a container all valves shall be tested to ensure that they are free from leaks.

(4) No containers shall be vented to the atmosphere of the filling shed, and if it is necessary to vent the contents of a full or partially full container, it shall be removed to a safe place for this purpose :

Provided that a suitable vent line may be connected to carry the vented gases away from the filling shed for dispersal in a safe place.

(5) Before filling the containers they shall be visually inspected for damage caused by denting or corrosion, and for faulty valves. They shall also be checked to make sure that they are of a type suitable for the particular product it is proposed to fill into them.

92.—(1) Every reasonable precaution shall be taken to ensure that valves and fittings on containers are in sound condition and that the containers are free from water, air or foreign matter. Inspection of empty containers shall include a check on weight and an examination of the name-plate to confirm the rating to be correct to specification for the proposed filling ratio. When valves are found to be in the open position or in a damaged condition, special ventilation measures shall be taken to remove any gas, air or moisture present in the container.

Charging
containers.

(2) Full containers shall be inspected by checking the weight and testing the container valves, and on completion of the inspection the valves shall be sealed.

(3) A suitable arrangement shall be provided to enable containers to be safely vented should it be necessary to reduce the contents or to effect repairs.

(4) Relief valves shall be fitted in the filling line at any point where liquid may be trapped between closed valves. Discharge from relief valves shall not vent to atmosphere inside buildings.

93.—(1) Containers shall be handled with great care at all times and if the valve protective cover is detachable, it shall be replaced when the container is not in use.

Handling
mainte-
nance and
test.

(2) Lubricants and jointing compounds shall be resistant to liquefied petroleum gas, water and heat.

(3) When containers are not in use, outlet valves shall be kept tightly closed even if the containers are considered to be empty.

(4) At intervals not exceeding five years, containers shall be hydraulically tested to one and a half times the working pressure and the date of the last test, the number of the container and the test pressure shall be painted on the container and recorded in a log book kept for that purpose by the licensee.

94. Valves, unions and hoses used for container filling shall be resistant to the solvent action of liquefied petroleum gases. They shall be designed for a bursting pressure of five times the maximum pressure they will have to carry in service. The hoses shall be provided with a union for attachment to the supply pipe and a quick closing valves at the end to which the container is coupled. The hoses, complete with unions and valves, shall be examined visually daily and tested hydraulically at monthly intervals, to twice their working pressure.

Pipes and
hoses.

95. All filling points, lines and connections shall be electrically bonded and earthed, and the resistance of the earth shall not exceed 10 ohms.

Static
electricity.

96.—(1) Dry powder fire extinguishers shall be kept readily available for use in connection with any liquefied petroleum gas installation in case of fire.

Fire
precautions.

(2) Installations shall be provided with a water supply for fire-fighting, and gas storage tanks shall be fitted with water spray system utilizing "fog nozzles" or similar devices.

PART VII—FUELLING OF AIRCRAFT

97.—(1) This regulation and the next two succeeding regulations shall have special application to the fuelling of aircraft,

Precautions
while
fuelling
aircraft.

(2) In addition to any other regulation :—

(a) Before commencing fuelling, fire extinguishers shall be placed in readiness so as to be accessible for immediate use in an emergency.

(b) In no circumstances shall aircraft engines be turned over during fuelling and all ignition switches must be in the off position.

(c) No smoking or naked lights shall be allowed anywhere on the apron or tarmac and within 50 feet of the aircraft.

(d) Fuelling of aircraft shall not be undertaken when passengers are on board except in accordance with procedures ensuring the safety of person and property agreed between the aircraft owner or operator and the fuelling agency and approved by the Controller of Ground Service, Federal Ministry of Aviation.

(e) Fuelling of aircraft shall not be undertaken whilst maintenance work, likely to cause a spark, is in progress.

(f) "No Smoking" warning notices shall be provided and fixed in prominent positions in the vicinity of the fuelling operations as to be visible to passengers and other persons in that vicinity.

(g) Fuelling shall cease immediately if any other aircraft runs up its engines within 50 feet of the aircraft.

(3) While fuelling is in progress,—

(a) the fuelling vehicle shall be provided with an adequate number of fire extinguishers ;

(b) no other vehicles shall normally be allowed in the vicinity, and if it is necessary for a vehicle to be in the vicinity it shall be so placed as not to obstruct the exit of the fueller, and its engine shall be stopped and not be restarted during the fuelling operation.

(4) The provisions of this regulation shall apply to any de-fuelling operation.

Earthing
and
bonding.

98. During any fuelling or de-fuelling operation, an aircraft shall be earthed with an earthing device of an approved type and earthing and bonding wires shall be regularly tested and examined.

Operation
of fuelling
vehicles.

99.—(1) During operations for the purposes of regulation 98 fuelling vehicles shall be attended by at least one competent person.

(2) Special care shall be taken to avoid spillage of overflow, and if this occurs the following action shall be taken,—

(a) engines of the fuelling vehicles shall be stopped ;

(b) any fuelling vehicle in the area of the operation shall be towed away by means of a long-tow rope attached to a vehicle in a safe area ;

(c) operations shall not recommence until all spilled fuel has been cleared and the area is vapour free ;

(d) if the fuelling vehicle itself is affected by spillage it shall be cleaned down and its engine started in a safe area.

Power to
make
further
rules in
respect of
aircraft
refuelling.

100. The Controller of Ground Service of the Federal Ministry of Aviation may make such other rules as he may think fit for the storage and handling of petroleum and the refuelling of aircraft on the ground in aerodrome areas.

PART VIII—GENERAL

Form of
licence.
Schedule.

101. Licences granted under these regulations shall be in the forms set out in the Schedule.

102. Any licence granted under these regulations may be revoked at any time by the Permanent Secretary, or by the officer who granted it, if he is satisfied that the licensee or any person in his employ has infringed any of the conditions of the licence or any provision of these regulations.

Revocation of licences.

103. Notwithstanding the provisions of regulation 43 above, any officer authorised by the appropriate authority or by the Chief Petroleum Engineer or a police officer not below the rank of Inspector may at any time enter and inspect any premises on which he has reason to suspect that a breach of these regulations is being committed.

Right to enter and inspect premises in case of offences.

104.—(1) Any person who—

Offences.

- (a) commits a breach of any of the provisions of these regulations,
- (b) fails to comply with any provisions of these regulations, any direction given thereunder or any condition of any licence issued thereunder,
- (c) fails to permit any inspection authorised under these regulations, or
- (d) makes a return required by these regulations, or wilfully furnishes information so required, which is in any respect false or insufficient,

shall be guilty of an offence and be liable on summary conviction to a fine not exceeding fifty pounds or to imprisonment for a term not exceeding six months or to both, and when the offender is the holder of a licence granted under these regulations his licence may be cancelled by the Permanent Secretary.

(2) The master of any ship or a person in charge of—

- (a) any boat or other vessel, as defined by the Merchant Shipping Act 1962 or
- (b) any motor vessel,

1962 No. 30.

in relation to which any breach or non-compliance within the meaning of paragraph (1) above occurs, shall be guilty of an offence and on summary conviction shall be liable to a fine not exceeding fifty pounds or to imprisonment for a term not exceeding six months or to both, in addition to the various penalties laid down in Chapter 46 of the Merchant Shipping Act 1962.

105. Nothing in these regulations shall be construed as enabling any person to be held guilty of an offence thereunder of any act or omission that did not, at the time when it took place constitute such an offence.

Saving.

SCHEDULE
FORMS OF LICENCES

FORM A

Reg. 101

FEDERATION OF NIGERIA

The Petroleum Act

Cap. 150

LICENCE TO STORE CLASS "A" PETROLEUM ONLY* OR CLASS "A" AND CLASS "B" PETROLEUM TOGETHER

No..... Fee.....

Licence is hereby granted to.....
of..... for the storage in the premises described below :—

of.....gallons class "A" petroleum only,
of.....gallons in all petroleum both class "A" and class "B", subject to the conditions prescribed by the Petroleum Regulations 1967,

This licence shall expire on the 31st day of December next following the date of issue hereof and may be renewed on application being made for this purpose not less than thirty days previous to the date of expiry.

Description of the premises above referred to :—

.....
.....

.....
Date of Issue

.....
*Signature of Officer of
appropriate authority*

Rank or office.....

This licence is issued subject to the provisions of the Petroleum Regulations 1967, of which the licensee admits cognizance.

*Delete whichever is not applicable.

reg. 101

FORM B

FEDERATION OF NIGERIA

Cap. 150

The Petroleum Act

LICENCE TO STORE PETROLEUM OTHER THAN
CLASS "A" PETROLEUM

No.....

Fee.....

Licence is hereby granted to.....
for the storage in the premises described below, of.....

.....gallons of petroleum other than class "A" petroleum,
subject to the conditions prescribed by the Petroleum Regulations 1967.

This licence shall expire on the 31st day of December next following the date of issue hereof, and may be renewed on application being made for this purpose not less than thirty days previous to the date of expiry.

Description of the premises above referred to :—

.....
.....

.....
Date of Issue

.....
*Signature of Officer of
appropriate authority*

Rank or office.....

This licence is issued subject to the provisions of the Petroleum Regulations 1967, of which the holder admits cognizance.

FORM C

reg. 101

FEDERATION OF NIGERIA

Cap. 150

The Petroleum Act

Cap 150

LICENCE TO STORE CLASS "A" OR CLASS "B"
*PETROLEUM IN UNDERGROUND STORAGE TANKS

No. Fee.....

Licence is hereby granted to.....

of.....
for the storage in an underground tank on the premises described below and
shown on the plan annexed hereto of.....
gallons of class "A" or class "B" *petroleum subject to the conditions
of the Petroleum Regulations 1967.

This licence shall expire on the 31st day of December next following the
date of issue hereof, and may be renewed on application being made for this
purpose not less than thirty days previous to the date of expiry.

Description of the premises above referred to :—

* Delete whichever is not applicable.

Date of Issue

*Signature of Officer of
appropriate authority*

Rank or office.....

This licence is issued subject to the provisions of the Petroleum Regulations
1967, of which the holder admits cognizance.

FORM D

reg. 48

FEDERATION OF NIGERIA

The Petroleum Act

Cap. 150

LICENCE TO STORE CLASS "A" PETROLEUM
IN BINS OR PITS

No. Fee.....

Licence is hereby granted to.....

for the storage in*.....

on premises described below of.....
gallons of class "A" petroleum subject to the conditions of the Petroleum
Regulations 1967.

This licence shall expire on the 31st day of December next following the
date of issue hereof, and may be renewed on application being made for this
purpose not less than thirty days previous to the date of expiry.

Description of the premises above referred to :—

.....
.....
.....

Date of Issue

Signature of Officer of appropriate authority

Rank or office.....

This licence is issued subject to the provisions of the Petroleum Regulations 1967 of which the holder admits cognizance.

* Here state whether bins or pits and state how many of each.

reg. 101

FORM E

FEDERATION OF NIGERIA

Cap. 150

The Petroleum Act

LICENCE TO STORE PETROLEUM IN BULK NOT BEING CLASS "A" PETROLEUM

No. Fee.....

Licence is hereby granted to.....
for the storage in the premises described below, and shown on the annexed hereto, ofgallons of petroleum in bulk, other than class "A" petroleum subject to the conditions prescribed by the Petroleum Regulations 1967.

This licence shall expire on.....and may be renewed on application being made for this purpose not less than thirty days previous to the date of expiry.

Description of the premises above referred to :—

.....
.....

Date of Issue

Signature of Officer of appropriate authority

Rank or office.....

This licence is issued subject to the provisions of the Petroleum Regulations 1967, of which the holder admits cognizance.

FORM F

reg. 101

FEDERATION OF NIGERIA

The Petroleum Act

Cap. 150

LICENCE TO STORE CLASS "A" PETROLEUM IN BULK

No. Fee.....

Licence is hereby granted to
for the storage in the premises described below and shown on the plan
annexed hereto of gallons of class "A"
Petroleum in bulk subject to the conditions prescribed by the Petroleum
Regulations 1967.

This licence shall expire on.....and may be
renewed on application being made for this purpose not less than two months
previous to the date of expiry.

Description of the premises above referred to :—

.....
.....

Date of Issue

*Signature of Officer of
appropriate authority*

Rank or office.....

This licence is issued subject to the provisions of the Petroleum Regulations
1967, of which the holder admits cognizance.

FORM G

reg. 101

Regula-
tion 57.

FEDERATION OF NIGERIA

The Petroleum Act

Cap. 150

LICENCE FOR THE TRANSPORT OF PETROLEUM IN
BULK BY MEANS OF A PIPELINE

No.

Licence is hereby granted to.....
for the transport of petroleum by means of the pipelines described below,
subject to the provisions of the Petroleum Act and the regulations made
thereunder and to the further conditions on the back of this licence.

Date.....

*Signature of Officer or
appropriate authority*

Rank or office.....

DESCRIPTION OF PIPELINES

(Insert description of pipeline)

1. The route of underground pipeline shall be indicated in a manner approved by the Chief Petroleum Engineer.
2. Accurate safety drawing shall be kept showing the position of the pipelines and the location of the control valves.
3. Underground pipelines shall be protected against corrosion when in the opinion of the Chief Petroleum Engineer, soil conditions render such protection necessary.
4. All pipelines shall be patrolled and inspected, once in every 24 hours or at such longer intervals as the Chief Petroleum Engineer may approve and in addition at all times when pumping operations are taking place, by competent persons appointed by the licensee of the pipeline and details of the inspection shall be recorded in a log book provided for that purpose. When patrolling by night flame-proof hand lamps, shall be used by such persons.
5. The premises occupied by pipelines when under the control of the licensee shall be kept in a clean condition reasonably free from grass, weeds and all flammable material.
6. Lines shall bear colour marking or other identifications to indicate the product or service for which the line is used.
7. When required by the Chief Petroleum Engineer or an officer authorised in writing by him in that behalf all unburied pipelines outside licensed storage areas shall be run in open trenches or between dwarf walls or embankments not less in height than twice the diameter of the largest pipe; and fire-stops (each consisting of two cross walls at not less than thirty-six inches apart with the space between filled with sand) shall be provided at intervals of not more than three hundred feet along the full length of each line.
8. Where pipelines run in a sleeve through a tank bund or other structure used to retain oil within the confines of a given area, the annular spaces between the pipes and the sleeves shall be filled in to render them oil-tight.
9. Blanks used to separate two sections of pipelines shall be of adequate thickness and have conspicuous or projecting tabs.
10. Stays, guyropes or tackle of any description shall not be attached to the pipelines.
11. Pipework shall not be carried across footpaths unless adequate crossing facilities with reasonable and safe access is provided.
12. Steam lines shall be protected against accidental contact by operating staff or other persons.
13. Provision shall be made in the laying of pipelines to allow for maximum expansion and contraction of the lines and their contents, and for jarring and vibration of the lines and the ancillaries to which they are attached.
14. Pipelines passing under railways, roads and other points where loads may be applied on the pipe shall be enclosed in suitable load-carrying sleeves or culverts or otherwise protected against injury and the ends of the protective sleeves or culverts shall be left exposed where practicable.

15.—(1) Pipelines shall be tested in the presence of an inspecting officer before the lines are commissioned and thereafter at six monthly intervals or such longer intervals as the Chief Petroleum Engineer may in writing permit, or when required by an inspecting officer who shall give reasonable notice.

(2) All tests shall be properly recorded in a log book approved by the Chief Petroleum Engineer and kept by the licensee for that purpose and the tests shall consist of placing the line under a pressure of twice the working pressure or 120 lbs per square inch (whichever is the higher) for a period of not less than thirty minutes during which period no loss of pressure shall occur.

16. Where pipelines make a connection to the shell or bottom of a tank, or end at a jetty, the connection between a pipeline and a tank shall be sufficiently flexible to allow settling of the tank or temperature expansion of the connection pipeline to the tank.

17. All fittings on underground oil pipelines shall be of steel.

18. Points shall be provided to which an inter-connection of pipelines can be made to enable a tank transfer of products to be effected in the event of an emergency.

19. Due precautions shall at all times be taken against fire including the maintenance of fire extinguishing appliances of approved type. Notices strictly prohibiting smoking, lighting of matches, and the carrying of unprotected lights shall be provided and fixed in prominent positions in and about the premises.

20. The premises when under the control of the licensee shall be efficiently protected against unauthorised approach or interference.

21. The premises and pipelines may be inspected at any time by an officer of the authority issuing the licence or by a Police Officer not below the rank of Assistant Superintendent or by an inspector authorised by the Chief Petroleum Engineer on production of evidence of identity.

The licensee shall immediately carry out all reasonable instructions of such inspecting officers.

22. This licence shall be liable to be forfeited for any contravention of the Petroleum Act or of any regulations made thereunder or of any of the conditions contained in this licence.

FORM H

reg. 101

FEDERATION OF NIGERIA

The Petroleum Act

Cap. 150

LICENCE FOR TRANSPORT OF PETROLEUM IN BULK
BY BARGE

No.....

Licence is hereby granted for the transport of petroleum in bulk by barge as described below, subject to the provisions of the Petroleum Act and the regulations made thereunder, and to the further conditions on the back of this licence.

Date.....

.....
*Signature of Officer or
appropriate authority*

Rank or office.....

DESCRIPTION OF BARGE

(Description of Barge above referred to)

1. Transport of petroleum in bulk by barge shall be only by means of special tank barges of a design approved by the Government Inspector of Shipping.

2. No barge will be approved unless built in accordance with recognized rules and under the supervision of a responsible surveyor.

3. The tanks in the barges shall be maintained in good condition and free from leakage, each tank shall be fitted with horizontal bar under each sight port to indicate when the tank is ninety-seven per cent full. An air-space of not less than three per cent of tank shall be left when filling.

All inlets and outlets shall be properly secured and gas-tight.

4. Tank barges shall be in charge at all times of a competent person or persons authorized by the licensee. No unauthorised person shall be permitted to travel on the barge. Smoking and the use of naked lights shall not be permitted on or in the vicinity of the barge.

5. Tank barges shall be loaded and unloaded in accordance with rules approved by the Government Inspector of Shipping.

6. There shall be exhibited at not less than six feet above the deck on every tank barge containing petroleum a red flag by day and a red lamp of approved safety design by night.

7. No tank barge shall be loaded or unloaded between sunset and sunrise.

8. Save as provided in paragraph 6, no fire or light of any description and no matches or any detonating article or substance shall be, or shall be taken, on board any tank barge when Class "A" petroleum is on board.

9. Due precautions shall at all times be taken against fire including the maintenance of fire extinguishing appliances of approved design. Notice strictly prohibiting smoking, lighting of matches, and the carrying of unprotected lights shall be provided and fixed in prominent positions in the barge.

10. Every tank barge, other than a motor-propelled barge, having class "A" petroleum on board shall be towed by a tug and, if steam is the motive power of such tug, the funnel top or tops shall be fitted with efficient spark protectors.

11. The tanks and bilges of every tank barge which has carried class "A" petroleum shall, immediately after the barge is unloaded, be thoroughly cleansed of all traces of such petroleum and thoroughly ventilated.

12. The tank barge may be inspected at any time by the Government Inspector of Shipping or by an officer authorised by him or a police officer not below the rank of Assistant Superintendent or by an Inspector authorised by the Chief Petroleum Engineer on production of evidence of identity.

The licensee shall immediately carry out all reasonable instructions of such inspecting officers.

13. This licence shall be liable to be forfeited for any contravention of the Petroleum Act or of any regulations made thereunder or of any of the conditions contained in this licence.

FORM I

reg, 101

FEDERATION OF NIGERIA

The Petroleum Act

Cap. 150

LICENCE FOR TRANSPORT OF PETROLEUM IN
BULK BY ROAD OR RAIL

No.....

Licence is hereby granted for the transport of petroleum in bulk as described below, subject to the provisions of the Petroleum Act and the regulations made thereunder, and to the further conditions on the back of this licence.

Date.....

.....
*Signature of Officer of
appropriate authority*

Rank or office.....

DESCRIPTION OF MEANS OF TRANSPORT

*(Description of Means of Transport above Referred to)**Conditions of Licence*

1. Transport of petroleum in bulk by road shall be only by means of special tank vehicles of a design approved by an Engineer appointed by the appropriate authority.

2. Transport of petroleum in bulk by rail shall be only by means of special railway tank wagons of a design approved by the General Manager of the Nigerian Railway Corporation.

3. The vehicle or wagons shall be maintained in good condition and free from leakage. They shall be conspicuously labelled with the words "HIGHLY FLAMMABLE". An air-space of not less than two and one-half per cent of tank shall be left when filling. All inlets and outlets shall be properly secured and gas-tight.

4. Tank vehicles shall be in charge at all times of a competent person or persons authorised by the licensee. No unauthorised person shall be permitted to ride on the vehicle. Smoking and the use of naked lights shall not be permitted in the vicinity of the vehicle. The vehicle shall not be halted within sixty feet of a fire or open flame.

5. Tank vehicles shall be loaded or unloaded in accordance with rules approved by the Chief Petroleum Engineer for each design of vehicle.

6. Tank wagons shall be used only under conditions prescribed by the General Manager, Nigerian Railway.

7. No tank vehicle shall be loaded or unloaded between sunset and sunrise except where flood lighting or adequate electric illumination is available.

8. The premises occupied by tank vehicles and tank wagons under the control of the licensee shall be kept in a clean condition reasonably free from grass, weeds and all flammable material.

9. Due precautions shall at all times be taken against fire including the maintenance of fire extinguishing appliances of approved type. Notices strictly prohibiting smoking, lighting of matches and the carrying of unprotected lights shall be provided and fixed in prominent positions in and about the premises.

10. The premises, tank vehicles and tank wagons when under the control of the licensee shall be efficiently protected against unauthorised approach or interference.

11. The premises, tank vehicles and tank wagons may be inspected at any time by any officer authorised by the appropriate authority or a police officer not below the rank of Assistant Superintendent or by an inspector authorised by the Chief Petroleum Engineer on production of evidence of identity.

The licensee shall immediately carry out all reasonable instructions of such inspecting officers.

12. This licence shall be liable to be forfeited for any contravention of the Petroleum Act or of any regulations made thereunder or of any of the conditions in this licence.

reg. 101

FORM J

FEDERATION OF NIGERIA

Cap. 150

The Petroleum Act

LICENCE TO STORE PETROLEUM IN THE OPEN AIR

No.....

Fee.....

Licence is hereby granted to.....
for the storage in the open air on the premises described below and shown on the plan annexed hereto, of.....of class "A" petroleum and.....gallons of class "B" petroleum subject to the conditions prescribed by the Petroleum Regulations 1967.

This licence shall expire on the 31st day of December next following the date of issue thereof and may be renewed on application being made for this purpose not less than two months previous to the date of expiry.

Description of the premises above referred to:—

.....
.....

Date of Issue

*Signature of Officer of
appropriate authority*

Rank or office.....

This licence is issued subject to the provisions of the Petroleum Regulations 1967, of which the holder admits cognizance.

MADE at Lagos this 8th day of March 1967.

G. A. E. LONGE
*Permanent Secretary,
Federal Ministry of Mines and Power*

MERCHANT SHIPPING ACT 1962

(1962. No. 30)

THE MERCHANT SHIPPING (LIFE-SAVING APPLIANCES)
RULES 1967

ARRANGEMENT OF RULES

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2. Interpretation.
3. Ships to which the Rules apply.
4. Classification of ships.

PART II—PASSENGER SHIPS

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6. Ships of Class II.
7. Ships of Class III.
8. Ships of Class IV.
9. Ships of Class IVA.

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10. Ships of Class V.
11. Ships of Class VA.
12. Ships of Class VI.
13. Ships of Class VII.
14. Ships of Class VIIA.
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Requirements for Life-Saving Appliances

18. General requirements for lifeboats.
19. Carrying capacity of lifeboats.
20. Motor lifeboats.
21. Mechanically propelled lifeboats.
22. Class C boats.
23. Liferrafts.
24. Buoyant apparatus.
25. Marking of lifeboats, Class C boats, liferafts and buoyant apparatus.
26. Lifebuoys.
27. Lifebuoy lights, smoke signals and lines.
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Provision of Equipment and Rations in Lifeboats, Boats and Liferrafts

29. Equipment for lifeboats, Class C boats and other boats.
30. Rations for lifeboats.
31. Special equipment for certain motor lifeboats.
32. Security of equipment and rations in lifeboats, Class C boats and other boats.
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Stowage and Handling of Life-Saving Appliances

34. General provisions relating to stowage and handling of life-saving appliances.
35. Stowage and handling of lifeboats, Class C boats and other boats.
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37. Embarkation into lifeboats, Class C boats and other boats and liferafts.
38. Manning of lifeboats and liferafts.
39. Certificated lifeboatmen.
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44. Equivalentents and exemptions.

SCHEDULES

*No. of
Schedule*

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2. Table showing minimum numbers of sets of davits and cubic capacity of lifeboats in ships of Classes II and III.
3. General requirements for lifeboats.
4. Calculation of cubic capacity of lifeboats.
5. Machinery of motor lifeboats.
6. Machinery of mechanically propelled lifeboats.
7. Requirements for Class C boats.
8. Requirements for liferafts : part I Inflatable liferafts.
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13. Specifications of equipment for lifeboats, boats and liferafts :
 - Part I. Compasses for lifeboats.
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SCHEDULES

*No. of
Schedule*

- Part III Parachute distress rocket signals for lifeboats and liferafts.
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14. Davits and lifeboats launching gear :
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