

# **DUBLIN PORT AND DOCKS BOARD**

## **BYE-LAWS**

### **RELATIVE TO THE DISCHARGING, LOADING, HANDLING, STORAGE, AND DISTRIBUTION OF PETROLEUM AT THE PORT OF DUBLIN**



Made by the Dublin Port and Docks Board on 9th August, 1956, by virtue of the powers conferred on it by the Petroleum Acts, 1871 - 1881, and the Harbours Act, 1946, and of every and any other power so enabling it, as modified, confirmed and approved by the Minister for Transport & Power on 28th October, 1963 and amended on 15th December 1970.

**PART 1**

**PRELIMINARY AND GENERAL**

1. Definitions.
2. Application.
3. Commencement of operation of Bye-Laws and revocation of previous Bye-Laws.
4. Penalties.
5. Harbour Constable, direction by.
6. Arrest.
7. Occurrence of fire, explosion, leakage, spillage or other emergency.
8. Fire, Flame, Heat.
9. Static Electricity.
10. Lightning, precautions against.
11. Tanks, Pipe Lines and Pumps, construction, maintenance and identification of.
12. Plant and Equipment, prevention of leakage.

**PART 1****PRELIMINARY AND GENERAL**

In these Bye-Laws the expression "the Harbour" means the Port of Dublin and includes every place within the limits of application of these Bye-Laws.

**1. Definitions**

The word "petroleum" includes any Rock Oil, Rangoon Oil, Burmah Oil and oil or spirit made from petroleum, coal, schist, shale, peat, or other bituminous substance, but excluding butane, propane and all other classes of liquefied gasses.

For the purposes of these Bye-Laws Petroleum shall be classed as follows:-

**Class A Petroleum** which is petroleum having a flash point below 73° Fahrenheit.

**Class B Petroleum** which is petroleum having a flash point between 73° Fahrenheit and 150° Fahrenheit inclusive.

**Class C Petroleum** which is petroleum having a flash point above 150° Fahrenheit.

the expression "flash point" means the temperature at which petroleum, when tested in the manner set forth in the first schedule to the Petroleum Act 1879 (or by such other method as may from time to time be approved by statute) gives off an inflammable vapour;

where in any Bye-Law the word "petroleum" is mentioned without limitation to any particular class or classes of petroleum, the Bye-Law shall be deemed to refer to all classes of petroleum;

where any petroleum is contaminated by other petroleum or products to such an extent that the flash point of the resultant mixture is lower than that accepted for such petroleum such mixture shall be regarded for all the purposes of these Bye-Laws as petroleum of such lower flash point;

the word "vessel" includes a ship, boat, barge, lighter, or other water borne vessel of any description;

the expression "petroleum ship" means a vessel which is in the Port of Dublin with a whole or part cargo or consignment of petroleum or intending to load a whole or part cargo or consignment of petroleum in the Port of Dublin, with the

exception of Class C petroleum carried or to be carried in a part of a vessel specially constructed for the holding of bunker oils for use in the propulsion of the vessel itself and includes a vessel from which petroleum has been discharged whether within the Harbour or elsewhere if the holds or tanks have not been rendered free from inflammable vapour to the satisfaction of the Harbour Master;

the word "owner" means the owner or master of a petroleum ship or the owner of the petroleum thereon as the case may require;

the expression "the Harbour Master" means the Harbour Master for the time being of the Board and, in his absence, includes any Acting Harbour Master or Assistant to the Harbour Master of the Board;

the expression "the Port Engineer" means the Engineer for the time being of the Board, and in his absence includes any Acting Engineer or Assistant Engineer of the Board who has been authorised to act on behalf of the Port Engineer;

the expression "the Board" means the Dublin Port and Docks Board;

the word "quay" includes any quay, pier, jetty, wharf or any other discharging or loading place within the Harbour;

the word "licensee" means the person, company or firm to whom a licence has been issued by the Board pursuant to Bye-Law 40 of these Bye-Laws;

the expression "licensed premises" means premises to which a licence, issued by the Board pursuant to Bye-Law 40 of these Bye-Laws, applies;

the expression "approved standards" means such current Irish, British, or other Standard Specification or Code as may from time to time be accepted or specified by the Board;

the words "handling" and "handled" when used in relation to petroleum mean the movement of petroleum (other than discharging and loading) and include displacement of petroleum (liquid or vapour) by any operation such as ballasting or gas-freeing or by any other operation.

## 2. **Application**

These Bye-Laws shall apply to all parts of the Port of Dublin within the jurisdiction of the Board but the Board may by order grant exemptions from any specific Bye-Law or Bye-Laws as follows:-

- (a) In respect of petroleum of a particular kind as specified in the order,
- (b) In respect of petroleum in such part of the Harbour as may be specified in the order,

- (c) In respect of petroleum contained in closed tanks on motor vehicles on board a vessel in the Harbour,
- (d) In respect of petroleum, not exceeding such quantity as may be specified in the order, which is carried in sealed metal containers on board a vessel in the Harbour.

The Board in granting an exemption as aforesaid may do so generally or in a particular case and it may grant an exemption subject to compliance with such conditions (if any) as are laid down in the order granting the exemption.

### 3. **Commencement**

These Bye-Laws shall come into force forthwith and all other Bye-Laws of the Board relating to the discharging, loading, handling, storage and distribution of petroleum at the Port of Dublin shall be and are hereby revoked provided that this shall not affect the prosecution of any proceedings which have been commenced before the date of such revocation.

### 4. **Penalties**

Any person contravening any of the provisions of these Bye-Laws shall be liable to the penalty provided by Section 60. sub-section (12) of the Harbours Act, 1946, or Sections 4 and 5 of the Petroleum Act, 1871, as may be appropriate.

### 5. **Harbour Constables, direction by.**

A constable appointed by the Board may direct any person not actually engaged in loading or unloading petroleum and any person (even though engaged in such loading or unloading) who in the Constable's opinion is intoxicated to leave the vicinity of any vessel or place where petroleum is being loaded or unloaded, or is stored, and every such direction shall be complied with by the person to whom it is given.

### 6. **Arrest**

Any person who offends against any of these Bye- Laws shall be liable to be arrested.

### 7. **Occurrence of fire, explosion, leakage, spillage, or other emergency.**

If fire, explosion, leakage, suspected leakage, spillage, accident or other emergency should occur in or adjacent to a petroleum ship or licensed premises or any pipe, pipes, vessel or vessels connected therewith the following immediate action shall be taken:-

- (a) All relevant operations shall cease.
- (b) In case of fire and explosion the Fire Alarm shall be raised immediately;
- (c) The Licensee, Installation Manager, Master of the ship or other appropriate official shall be notified by the person in charge where the emergency has occurred;
- (d) Notice of any fire, explosion, leakage, suspected leakage, spillage, accident, or other emergency shall be given to the Harbour Master as soon as possible by the Master of the ship or such other person as may be in charge where the emergency has occurred;
- (e) The Master of the ship, the Licensee, or other appropriate official shall confirm in writing such notice to the Harbour Master and the Port Engineer as soon as possible after the incident, giving them a full report of the incident, its cause/s and effect/s and shall without delay carry out such works of construction or repairs as may be required by the Board to remedy any cause of leakage, or any condition likely to cause leakage, emergency, fire or explosion.

#### 8. **Fire, Flame, Heat**

Fire flame, heat or appliance capable of causing a spark shall not be allowed within 100 feet of any petroleum ship, building or place outside licensed premises where a concentration of inflammable vapour may occur, without the consent in writing of the Port Engineer or Harbour Master and then only subject to such safeguards as may be approved by him

#### 9. **Static Electricity**

All necessary precautions shall be taken to prevent accumulation of a static electrical charge in the discharging, loading and handling of petroleum, by efficient bonding and earthing, and/or controlled rate of movement or other method as may be specified in approved standards.

#### 10. **Precautions against lightning**

All necessary precautions in accordance with approved standards shall be taken to minimise the danger of fire or explosion resulting from atmospheric electrical disturbances.

#### 11. **Tanks, Pipe-Lines and Pumps, Construction, Maintenance, Operation and Identification of**

All tanks and all valves, pipelines, pumps and other fittings used in connection with the discharging, loading, handling, storage and distribution of petroleum,

whether situated within or without licensed premises, including those at the quay, other than the fittings belonging to a petroleum ship, shall be constructed, maintained and operated in accordance with approved standards, and shall bear colour markings or other identification to indicate the product or service for which the line is used.

12. **Plant and Equipment, Prevention of Leakage**

All filling and/or pumping plant, pipelines, fittings, flexible hoses and other equipment used in connection with the discharging, loading, handling, storage and distribution of petroleum shall be so constructed, maintained and operated as to prevent leakage and in accordance with approved standards.

**PART II****DISCHARGING, LOADING AND HANDLING OF PETROLEUM**

13. Inspection.
14. Red Flag or Light.
15. Notice of arrival and nature of cargo.
16. Berthing of Ship.
17. Distance between ships.
18. Notification of time of commencement.
19. Watchman.
20. Ventilation of holds.
21. Vapour-freeing of holds.
22. Illumination for discharge or loading.
23. Protection and use of openings.
24. Iron or Steel Tools.
25. Work on petroleum ship likely to cause sparks.
26. Pipelines and hoses.
27. Pipelines, isolation of portion of.
28. Quay designation.
29. Petroleum not to be discharged or loaded in unsuitable containers.
30. Containers to be removed immediately from quay.
31. Empty containers.
32. Tanks and holds to be secured.
33. Interruption of night operations.
34. Fire, flame, artificial light and electrical apparatus (on ship.)
35. Accident by fire.
36. Fire fighting appliances.
37. Smoking, matches.
38. Exclusion of vehicles.
39. Oil in navigable waters.



**PART 11****DISCHARGING, LOADING AND HANDLING OF PETROLEUM****13. Inspection**

The owner shall when so required by the Harbour Master or other official authorised by the Board afford every reasonable facility to enable such official to ascertain whether these Bye-Laws are duly observed.

**14. Red Flag or Light**

The Master of every petroleum ship 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 (in the case of a petroleum ship carrying any Class A petroleum the red flag shall have a white circular centre 6 inches in diameter) at the masthead or other conspicuous position and by night a red light at the masthead or where it can best be 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 Regulations, Rules or Bye-Laws;

provided that in the case of a petroleum ship being a petroleum barge which cannot normally comply with the requirements of this Bye-Law the Master of such petroleum ship shall display by day in a conspicuous position above the deck a red flag of metal not less than 18 inches square (in the case of a petroleum ship carrying any Class A petroleum the red flag shall have a white circular centre 6 inches in diameter) and by night an all round red light.

**15. Notice of Arrival and Nature of Cargo**

The owner of every petroleum ship, on entering the Harbour, shall without delay inform the Harbour Master of the quantity of petroleum in his ship and the flash point of every type of petroleum thereon and the manner in which such petroleum is stowed.

**16. Berthing of Ship**

The Master of every petroleum ship shall anchor or moor his ship only at such places as the Harbour Master shall from time to time direct, and shall not remove his ship therefrom, without the permission or the written order of the Harbour Master.

17. **Distance between Ships**

- (1) Two or more petroleum ships shall not, except for the purpose of trans-shipment, lie within 25 feet of one another unless, in the opinion of the Harbour Master, it is impracticable to maintain such distance.
- (2) Two or more petroleum ships shall not, without the written permission of the Harbour Master, lie within 100 feet of a vessel which is not a petroleum ship.
- (3) For the purpose of this Bye-Law a petroleum ship which is free of inflammable vapour and is not discharging, loading or handling Class A or Class B petroleum shall not be deemed to be a petroleum ship.

18. **Notification of time of commencement**

Before any petroleum is discharged or loaded the owner shall give due notice to the Harbour Master of the time and place of such discharging or loading in sufficient time to enable the Harbour Master or his deputy to attend on board, if he shall think fit, before such discharging or loading is commenced.

19. **Watchmen**

Every petroleum ship shall be watched by a competent person on board such ship until all petroleum shall have been discharged or loaded and the holds or tanks securely closed and every petroleum ship shall at all times have on board a responsible person to carry out and give effect to the provisions of these Bye-Laws. In addition, the owner of every petroleum ship shall be responsible for the cost of maintaining a continuous watch of the ship by a Harbour Constable of the Board during the whole period in which the ship is alongside any quay, wharf or jetty in the Harbour.

20. **Ventilation of Holds**

Before and throughout the discharging or loading of Class A or Class B petroleum contained in casks, barrels or other containers, the holds of a petroleum ship, having on board such containers, shall be thoroughly ventilated.

21. **Vapour-freeing of Holds**

After all petroleum has been removed from any petroleum ship the holds and tanks shall be rendered free from inflammable vapour; provided that this Bye-Law shall not be deemed to require to be free from inflammable vapour the tanks of a petroleum ship 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

in writing, and of which the tanks are closed down immediately after the discharge of such petroleum and are not re-opened while the petroleum ship is within the Harbour, except with the permission of the Harbour Master, in writing.

22. **Illumination for discharge or loading.**

Hoses for the discharging or loading of petroleum shall not be rigged or disconnected, nor shall petroleum be discharged or loaded between sunset and sunrise unless illumination is provided on board the petroleum ship to produce, in conjunction with such illumination from shore as may be available, a degree of illumination which in the opinion of the Harbour Master is adequate in the circumstances, the equipment for such illumination on board to be designed and constructed in accordance with Lloyds 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.

23. **Protection and use of openings.**

All openings from cargo tanks to the atmosphere, except the gas escape line, shall, save with the special permission of the Harbour Master, be kept closed during the discharging or loading of petroleum (other than Class C petroleum) on board a petroleum ship, except that ullage plugs or sighting ports may be removed for taking dips or samples, such ullage plugs or sighting ports to be closed immediately this has been done, unless such openings are adequately protected by fine gauze (of copper or other noncorroding flame resisting metal) of mesh not less than 28 to the linear inch, such gauze being maintained so that the passage of air through it is unrestricted, or by other effective means.

24. **Iron or Steel Tools**

Iron or steel hammers or other instruments capable of causing a spark shall not be used for the purpose of opening or closing the hatches or tank lids or connecting or disconnecting ship to shore hose and pipe connections of a petroleum ship.

25. **Work on Petroleum Ship likely to cause sparks**

No rivetting, caulking, chipping iron or steel, cleaning boilers or boiler tube repairs, or any other work likely to cause sparks, shall be done on a petroleum ship while it is in the Harbour, without the consent of the Harbour Master and without carrying out any precautionary measures that he may require as a condition of his consent.

26. **Pipelines and Hoses**

All pipes and other appliances used in the discharging or loading of petroleum in bulk shall be reasonably free from leakage. All pipelines and hoses shall, whilst rigged for discharging or loading of petroleum, be adequately and continuously earthed electrically and kept constantly under supervision and shall be rigged to the satisfaction of the Harbour Master.

27. **Pipelines, Isolation of Portion of**

In any pipeline used in the discharging or loading of petroleum, when deemed necessary by the Harbour Master provision shall be made to the satisfaction of the Harbour Master whereby any portion or portions in the immediate vicinity of a quay or railway can be isolated from the remainder of the pipeline and from the petroleum tank by intercepting valves or some other suitable method. So far as is reasonably possible no petroleum shall be allowed to be or remain in any such isolated portion except immediately before, during, or immediately after the pipeline is used for discharging or loading the petroleum.

28. **Quay Designation**

No petroleum shall be discharged or loaded at any quay other than such quay as the Harbour Master shall from time to time direct.

29. **Petroleum not to be discharged or loaded in unsuitable containers**

Petroleum contained in casks, barrels, or other containers shall not be discharged or loaded in the Harbour, unless such containers are staunch and free from leakage and are of such strength and construction as not to be liable to be broken or to leak except in case of gross carelessness or extraordinary accident. Provided that any defective containers may be discharged with the approval of the Harbour Master and under such conditions as he may direct.

30. **Containers to be removed immediately from quays.**

Except with the permission of the Harbour Master petroleum (other than Class C petroleum) contained in casks, barrels, or other containers shall not be brought to the place of loading until the petroleum ship is ready to receive it, or shall not be discharged at any quay until the vehicle or ship by which it is to be removed shall be at its place and ready to receive it, and all petroleum discharged in the Harbour shall be forthwith removed therefrom or to some licensed premises.

31. **Empty Containers**

All empty casks, barrels or other containers which have contained petroleum shall be securely closed while in the Harbour or upon any quay. No such empty casks, barrels or other containers (unless they have been steamed and are gas free) shall be allowed to remain on any quay after sunset.

32. **Tanks and Holds to be secured**

When the discharging or loading of petroleum has been commenced, such discharging or loading shall be proceeded with, with due diligence, and if it is discontinued the tanks and holds of the petroleum ship shall be immediately closed and all the same precautions shall be taken as if the vessel were fully loaded or the bulk had not been broken. No barrels or other cargo likely to cause a spark shall be discharged or loaded until all openings to tanks except the gas escape line are screwed down and gas tight.

33. **Interruption of Night Operations**

Should any accident or emergency occur during discharging, loading or handling of petroleum to or from ships between sunset and sunrise which necessitates a repair to the plant, pipes or connections or interferes in any way with the uninterrupted discharging, loading or handling of petroleum to or from ships, the whole of the operations shall cease and the tanks and holds of the petroleum ship or ships and the receptacles on shore shall be immediately closed and shall remain so until after sunrise unless the Harbour Master otherwise permits.

34. **Fire, Flame, Artificial Light and Electrical Apparatus (on ship.)**

From the time when the holds or tanks of a petroleum ship are first opened for the purpose of discharging, loading or handling petroleum (other than Class C petroleum) until such time as all petroleum shall have been removed from or loaded into such holds or tanks and the holds or tanks shall have been securely closed down and, in the case of discharging, rendered free from inflammable vapour as required by these Bye-Laws, there shall be no fire or artificial light on board such ship. Provided that this Bye-Law shall not prevent the use of lamps, heaters, cookers, or other apparatus, electric or otherwise, designed and constructed in accordance with Lloyd's 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 and provided also that this Bye-Law shall not be deemed to prohibit a petroleum ship from discharging, loading or handling petroleum, 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 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 (where they are additional) with the following requirements related to electrical equipment:-

- (1) The connection between the shore cable and the ship shall be made by means of a connection box designed, constructed, positioned and maintained in accordance with Lloyd's or other approved Classification Society's requirements and situated in a "safe place" as defined in Section 15 of the Rules for the Electrical Equipment of Ships of Lloyd's Register of Shipping or in any other section of such Rules in which this definition may subsequently appear.
- (2) The cable shall be flexible P.V.C. sheathed type in accordance with British Standard Specifications numbers 2004 and 2746 or such other type of flexible sheathed cable as may from time to time be approved by the Port Engineer.
- (3) Means, as by a changeover switch or suitable interlocking device, shall be installed at the ship's switch-board to prevent the shore supply from being connected to the ship's switch-board while this is connected to the ship's generating plant.
- (4) 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.

35. **Accident by Fire**

The owner shall take all due precautions for the prevention of accident by fire in discharging, loading or handling petroleum.

36. **Firefighting Appliances**

All petroleum ship and shore fire-fighting appliances shall be kept in a state of readiness during the operations of discharging, loading and handling petroleum.

37. **Smoking, Matches**

The owner shall take adequate steps to prevent any person under his control from smoking at or near the place where petroleum is being discharged, loaded or handled and to prevent any person engaged in such discharging, loading or handling, from carrying fuses, matches or other appliances whatsoever for producing ignition. Where any petroleum is carried on the deck of a petroleum ship the owner of the ship shall cause conspicuous notices to be posted up on board drawing attention to the danger arising from smoking or striking matches near such petroleum; no person engaged in discharging, loading or handling petroleum shall smoke at or near the place where petroleum is being

discharged, loaded or handled or carry on his person fuses, matches, or any appliances whatsoever for producing ignition.

38. **Exclusion of vehicles.**

Except for the purpose of complying with Bye-Law 30 no vehicle capable of igniting inflammable vapour shall enter or remain upon any quay at which petroleum (other than Class C petroleum) is being discharged or loaded or on which petroleum is lying and the Harbour Master shall be entitled to prohibit any vehicle from entering or remaining upon such quay and the person in charge of any such vehicle shall comply with such prohibition.

39. **Oil in Navigable Waters**

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

**PART III****LICENSED PREMISES AND THE HANDLING, STORAGE  
AND DISTRIBUTION OF PETROLEUM**

40. Licensing of premises.
41. Licensed premises to be used only for purpose stated in licence.
42. Maintenance of premises.
43. Watching of premises.
44. Officers of Board to have access.
45. Notices, at Main Entrance and on buildings.
46. New construction.
47. Boundary wall or fence.
48. Moats, provision and maintenance.
49. Moats, drainage.
50. Tank vents, relief valves.
51. Tank and Interceptor Manhole Covers.
52. Tank supports.
53. Tanks, alteration.
54. Tanks, filling and emptying.
55. Tanks, inspection and repairs.
56. Tanks out of commission.
57. Buildings, materials specification.
58. Filling Sheds, Store Buildings, Pumphouses, siting.
59. Filling Sheds, Store Buildings, permissible capacity.
60. Filling Sheds, Store Buildings, Pumphouses, construction.
61. Filling Sheds, Store Buildings, Pumphouses, ventilation.
62. Filling Sheds, Store Buildings, working.
63. Filling Sheds, Store Buildings, Pumphouses, use and maintenance.
64. Filling Sheds, Store Buildings, Pumphouses, inspection and repairs
65. Filling and pumping plant; siting.
66. Vehicles, Rail Tank Cars.
67. Vehicles, Rail Tank Cars; discharging, loading and refuelling.
68. Vehicles, restrictions.
69. Containers, quality.
70. Electrical apparatus and wiring (ashore).
71. Fire Precautions, General.
72. Fire Precautions; water cooling of tanks.
73. Fire Precautions; appliances, personnel.
74. Fire, Flame, Heat (on licensed premises).
75. Smoking.
76. Matches.
77. Refining petroleum.
78. Prevention of escape of petroleum.
79. Objectionable vapour.
80. Liquefied petroleum gas.



**PART III****LICENSED PREMISES AND THE HANDLING, STORAGE  
AND DISTRIBUTION OF PETROLEUM****Licensing of Premises**

40. (i) No person shall store petroleum at any place within the area of application of these Bye-Laws, except under and in accordance with a licence issued by the Board to which there shall be attached the provisions of these Bye-Laws and such other conditions as may seem to the Board to be expedient.
- (ii) Every licence shall have annexed thereto a plan showing sites of:-
- (a) Tanks for Class A and Class B petroleum,
  - (b) Filling sheds, store buildings and pumphouses for Class A and Class B petroleum,
  - (c) Buildings where smoking or naked flame are permitted,
  - (d) All other buildings.
- (iii) The Board may charge a fee of 25p for every such licence.
- (iv) A copy of the licence and of these Bye-Laws shall be kept upon the licensed premises available for reference.
- (v) The licensee shall comply with every condition attached to the licence.

**Licensed Premises to be used only for purposes stated in Licence**

41. (a) Petroleum shall be kept only on licensed premises. The Board may in any licence designate, by reference to a plan or otherwise, premises which may be used as storage tanks, service tanks, filling sheds, pumphouses and store buildings and the premises so designated shall not be used without the permission of the Board for any purpose other than those for which they are so designated.
- (b) The Class of petroleum (Class A, Class B or Class C) for which a storage tank is to be used shall be designated in the licence and no petroleum of a class other than that for which a tank is designated shall be placed or

permitted to remain in such tank without the permission in writing of the Port Engineer, except in case of emergency, which shall be notified immediately to the Port Engineer and the Harbour Master.

42. **Maintenance of Premises**

The licensee shall take all reasonable steps to maintain the licensed premises in a clean and orderly condition and shall ensure that the requirements of these Bye-Laws are observed by all persons employed on the premises and by all persons resorting thereto by his permission.

43. **Watching of Premises**

The licensed premises shall at all times be watched and guarded by a competent person or persons who shall prevent unauthorised persons from entering the licensed premises, and it shall be the duty of such person to take the action prescribed in Bye-Law 7 (a), (b) and (c) in the circumstances therein mentioned.

44. **Officers of Board to have access**

The Port Engineer, the Harbour Master or any other authorised officer of the Board shall at all reasonable times be allowed free access to all parts of the licensed premises and the licensee shall give such officer any assistance he may require for the purpose of:-

- (a) Ascertaining that the requirements of these Bye-Laws are duly observed, and
- (b) Examining the condition of the premises.

45. **Notices at Main Entrance and on Buildings**

- (a) The full name, address and telephone number of the person in control of licensed premises shall be prominently displayed at or near the principal entrance to the premises.
- (b) The words "Petroleum - Highly Inflammable, No Matches, No Lighters, No Smoking, No Naked Lights" shall be painted in conspicuous letters or otherwise suitably displayed in letters not less than three inches high near the entrance or entrances of licensed premises.
- (c) The words "Petroleum - Highly Inflammable, No Matches, No Lighters, No Smoking, No Naked Lights" shall be painted in conspicuous letters on the outside wall or otherwise suitably displayed in letters not less than three inches high near the entrance of all filling sheds, store buildings and pumphouses handling petroleum outside licensed premises.

**46. New Constructions**

The licensee shall in no circumstances erect or construct or alter materially any building, tank or other structure whatsoever upon licensed premises save with the written consent of the Board and subject to such conditions as the Board or Port Engineer may require. In the event of extensions or alterations in licensed premises being carried out by outside contractors the licensee shall ensure that the work is carried out in accordance with approved standards.

**47. Boundary Wall or Fence**

Licensed premises shall be surrounded by a wall or, at the option of the Board, by a fence, the materials, design and height of which wall or fence must be approved in writing by the Port Engineer. The wall or fence shall be constructed and maintained in good order by the licensee to the satisfaction of the Port Engineer.

No tank for the storage of Class A or Class B petroleum shall be erected at a lesser distance than the diameter of the tank or 50 feet, whichever is the less, from the outer boundary wall or fence but in any case this distance shall not be less than 30 feet.

No tank for the storage of Class C petroleum shall be erected at a lesser distance than 20 feet from the outer boundary wall or fence;

Provided that the requirements of this Bye-Law may be modified to conform with approved standards.

Nothing in this Bye-Law shall require a licensee to remove any tank existing at the date of the commencement of operation of these Bye-Laws by reason only of its proximity to a boundary wall or fence existing at the same date.

**48. Moats, provision and maintenance.**

- 1 (a) Each tank or group of tanks (not exceeding four in number) for storing Class A or Class B petroleum shall be surrounded by an embankment or retaining wall forming a moat of such dimensions as to contain:-
  - (i) In the case of a single tank, the total capacity of the tank plus 10 per cent.
  - (ii) In the case of more than one tank, the total capacity of the largest tank plus 10 per cent, allowance being made for the

space occupied by the other tanks in the moat up to the height of the embankment or retaining wall.

The total storage capacity of the tanks within one moat shall not exceed 40,000 tons and the distance between any two tanks shall not be less than the diameter of the smaller tank or 50 feet, whichever is the less.

- (b) Each tank or group or tanks for storing Class C petroleum shall be surrounded by an embankment or retaining wall at least 2 feet high.
  - (c) Tanks not exceeding 20 feet in diameter may be sited together in groups not exceeding 3,000 water tons capacity. For the purpose of this Bye-Law each such group of tanks shall be regarded as one tank.
  - (d) No embankment or retaining wall shall be required in the case of tanks which are completely buried. In the case of tanks more than 45 feet in height, spherical tanks or floating roof tanks, the requirements of Bye-Law 47 and of this Bye-Law may be modified by the Port Engineer at his discretion. The foregoing requirements of this Bye-Law shall not apply to installations existing at the date of the commencement of operation of these Bye-Laws if such installations are not subsequently altered, and in any other case they may be modified by the Board to conform with approved standards.
- 2.
- (a) The embankment or retaining wall of a moat shall be so constructed and maintained as to withstand any pressure to which it may be subjected when the moat is filled with water.
  - (b) All embankments and retaining walls shall be so constructed and maintained as to prevent leakage of petroleum and shall be constructed of fire-resisting materials to the satisfaction of the Port Engineer.
  - (c) Floors of moats shall be such as to resist excessive absorption or leakage of petroleum into the ground. All grass or other vegetable matter shall be kept short and all cuttings removed at once.
  - (d) Nothing shall be fixed, placed or stored within a moat except the tanks or tanks, fittings, pipelines, supports and such other equipment as may be allowed by the Port Engineer.

49. **Moats, Drainage**

Each moat surrounding a tank or tanks shall be drained by means of a valve actuated from outside the moat. The valves shall be kept closed and locked except when actually in use for draining off water. So far as is reasonably possible no water shall be allowed to remain in the moat.

50. **Tank Vents, Relief Valves**

Every petroleum tank shall have free vents or some form of relief valve or valves for preventing the development of excessive internal pressure or vacuum. These shall have such capacity that the pressure of the petroleum vapour on the discharge side and the vacuum on the entry side shall not exceed the working load of the tank shell or roof, which shell or roof shall be designed, constructed and maintained to comply with approved standards.

Where tanks in existence at the date of the commencement of operation of these Bye-Laws do not comply with the foregoing requirements the internal pressures of such tanks shall be limited to three inch water gauge and one inch water gauge vacuum.

All vent openings and relief valves shall be screened by fine gauze (of copper or other non-corroding flame resisting metal) of mesh not less than 28 to the linear inch, such gauze being maintained so that the passage of air through it is unrestricted. All other openings shall be rendered gas-tight by screwed or bolted doors, caps or plugs.

51. **Tank and Interceptor Manhole Covers**

Where fitted, the manhole covers of all tanks and interceptors shall be kept closed except on the occasion of cleaning or repairing of the tanks and interceptors.

52. **Tanks Supports**

Where tanks are supported by steel columns these columns shall be covered with protective concrete or other material if so required by the Port Engineer.

53. **Tanks, Alterations**

No alteration shall be made in any of the tanks in which petroleum is authorised to be kept by virtue of these Bye-Laws save with the approval in writing of the Port Engineer.

54. **Tanks, Filling and Emptying**

Each petroleum tank shall be provided with independent connections for the filling and emptying of its contents. The internal arrangements of both inlet and outlet shall be such as to allow the flow of petroleum to take place without excessive agitation and so that the orifices shall so far as is reasonably possible be below the surface level of the petroleum in the tank, to avoid the accumulation of static electricity.

55. **Tanks, Inspection and Repairs**

Before a petroleum tank is entered for inspection or before work is carried out in or on it which necessitates the use of apparatus involving fire, flame or heat or capable of causing a spark, the tank shall be emptied, disconnected completely from all pipelines and thoroughly ventilated and the licensee shall obtain a certificate from a competent person that the tank is free of inflammable vapour and the tank shall be maintained in that state so long as the inspection or repair work is in progress.

A tank shall not be entered without the authority in writing of the person in charge of the licensed premises. In this Bye-Law the expression "competent person" means any person who has special training for the purpose and who has been recognised by the Board and the licensee concerned as being competent to perform the necessary tests and qualified to give such a certificate.

56. **Tanks out of Commission**

Should a licensee discontinue to use any tank for the storage of Class A or Class B petroleum he shall furnish to the Port Engineer a certificate from a competent person that the tank is free of inflammable vapour. In this Bye-Law the expression "competent person" means any person who has special training for the purpose and who has been recognised by the Board and the licensee concerned as being competent to perform the necessary tests and qualified to give such a certificate.

57. **Buildings, Materials, Specification**

All the buildings on licensed premises shall be constructed of fire-resisting materials. Timber flooring, wall sheeting or partition and roof members or sheeting may be used where approved by the Port Engineer.

58. **Filling Sheds, Store Buildings, Pumphouses, Siting**

For petroleum filling sheds, store buildings and pumphouses the following minimum distances shall be observed, the measurements being taken between the nearest points of the perimeter of the filling shed, store building, or pumphouse as the case may be -

- (a) Between the outer boundary wall or fence and any filling shed or store building for
  - (1) Class A petroleum - 50 feet.
  - (2) Class B petroleum - 20 feet.
- (b) Between any petroleum filling shed or store building and a storage tank for
  - (1) Class A petroleum - the diameter of the tank or 50 feet, whichever is the less but not less than 20 feet in any case,
  - (2) Class D petroleum - 20 feet.
- (c) Between any building in which hot work may take place or open fires may be used and a filling shed, store building or pumphouse for
  - (1) Class A petroleum - 50 feet.
  - (2) Class B petroleum - 20 feet.

Nothing in this Bye-Law shall require a licensee to remove any building existing at the date of the commencement of operation of these Bye-Laws by reason only of its proximity to a boundary wall or fence or a storage tank existing at the same date or to a building in which hot work may take place or open fires may be used at the same date.

59. **Filling Sheds, Store Buildings, Permissible Capacity**

Not more than 5,000 gallons of petroleum other than Class C petroleum shall be in a filling shed or store building.

60. **Filling Sheds, Store Buildings, Pumphouses, Construction**

All petroleum filling sheds, store buildings and pumphouses shall be constructed of fire-resisting materials throughout and doorways shall be sufficient to provide adequate means of escape. No filling shed shall have less than two doors. No door shall open inwards.

- (a) In the case of filling sheds and store buildings for Class A and Class B petroleum the floor shall form a well of a capacity sufficient to retain the whole of the petroleum liable at any time to be present in the filling shed or store building. The wall shall be so constructed as to prevent any leakage of petroleum.

The well shall not be more than 2 feet deep. In the case of pumphouses for Class A and Class B petroleum, doorways of other openings shall be built up to a height of not less than 6 inches above the level of the floor

of the building or the floor shall be sunk to a depth of not less than 6 inches below the level of the surrounding ground.

- (b) None of the requirements in paragraph (a) of this Bye-Law shall apply to filling sheds, store buildings or pumphouses used for Class C petroleum only. The Port Engineer may, at his discretion, allow in these buildings such quantity of Class A and/or Class B petroleum as is necessary for the handling or filling operations.

61. **Filling Sheds, Store Buildings, Pumphouses, Ventilation**

All petroleum filling sheds, store buildings and pumphouses shall be efficiently ventilated at ground level and near the roof (or in the roof) and all ventilators and openings, other than doorways and louvres fitted for roof ventilation shall be covered with fine gauze (of copper or other non-corroding flame resisting metal) of mesh not less than 28 to the linear inch, such gauze being maintained so that the passage of air through it is unrestricted.

62. **Filling Sheds, Store Buildings, Working**

The following requirements shall apply to all filling sheds and store buildings for petroleum:-

- (a) All filling apparatus shall be efficiently earthed and bonded together to prevent an accumulation of static electricity. The pipes connecting storage tanks to a filling shed shall be of steel or other approved material and the filling apparatus shall be so designed as to secure the minimum exposure of petroleum. Where overhead tanks are provided they shall be fitted with vent pipes carried to the open air and with overflow pipes and drainage pipes connected to a drainage tank of adequate capacity.

The upper end of all vent pipes shall be covered with fine gauze (of copper or other non-corroding flame resisting metal) of mesh not less than 28 to the linear inch, such gauze being maintained so that the passage of air through it is unrestricted. Persons employed in filling sheds where Class A petroleum is handled shall not wear boots or shoes containing exposed iron or steel plates or studs.

- (b) All store buildings shall be kept securely closed except when petroleum is being deposited therein or withdrawn therefrom or when it is necessary for them to be open for some similar reason. At all times when a store building is open a competent person shall be in attendance to ensure that the requirements of these Bye-Laws are properly observed and that all necessary precautions are taken to prevent accident from fire or explosion. Vessels which, although empty, have contained petroleum



shall be kept securely closed at all times.

- (c) All containers shall be properly stacked so as not to obstruct any passage or ventilation opening and empty containers shall not be stacked in such a way that the capacity of the retaining wall is insufficient for the quantity of petroleum kept in the filling shed or store building.

**63. Filling Sheds, Store Buildings, Pumphouses, Use and Maintenance**

Petroleum only shall be kept in a filling shed or store building or handled in a pumphouse and all such buildings shall be kept clean and free from grit, dirt or other substance liable to cause a spark.

**64. Filling Sheds, Store Buildings, Pumphouses, Inspection and Repairs**

Before any petroleum filling shed, store building or pumphouse is entered for work with apparatus involving fire, flame or heat or capable of causing a spark the licensee shall obtain a certificate from a competent person that the building is free of inflammable vapour.

In this Bye-Law the expression "competent person" means any person who has special training for the purpose and has been recognised by the Board and the licensee concerned as being competent to perform the necessary tests and qualified to give such a certificate.

**65. Filling and Pumping Plant, Siting**

All filling plant and all pumping plant other than that contained in filling sheds or pumphouses shall be erected as the Port Engineer shall approve in open spaces clear of buildings or stores. Alterations in the position of such filling or pumping plant shall not be made without the approval in writing of the Port Engineer.

**66. Vehicles, Rail Tank Cars**

All vehicles and rail tank cars for the transporting of bulk petroleum shall be constructed, maintained and used in accordance with approved standards, and all statutory provisions and orders which are applicable and in force for the time being.

**67. Vehicles, Rail Tank Cars, Discharging, Loading and Refuelling**

The operations of discharging, loading and re-fuelling petroleum vehicles and of discharging and loading rail tank cars shall be carried out in accordance with approved standards.

68. **Vehicles, Restrictions**

Every vehicle or apparatus inside licensed premises shall conform as to type and standard of maintenance, with approved standards. No vehicle except of a type approved by the Port Engineer shall enter or remain within 50 feet of any place where a concentration of inflammable vapour may occur outside licensed premises.

69. **Containers, Quality**

All casks, barrels, cans or other containers used to contain petroleum shall be of metal or other approved material and of such strength and construction as not to be liable to be broken or to leak except in case of gross carelessness or extraordinary accident and shall be staunch, securely closed and free from leakage.

70. **Electrical Apparatus and Wiring (Ashore)**

Where a concentration of inflammable vapour may occur at any place where Class A or Class B petroleum is kept, handled or exposed the following conditions shall be observed in the vicinity thereof:-

- (1) All electrical apparatus within 50 feet and the associated wiring shall be flameproof and intrinsically safe.
- (2) When a permanent electrical installation is installed within 50 feet it shall comply with the recommendations of British Standard Code of Practice - C.P. 1003 - "Installation and Maintenance of Flameproof and Intrinsically Safe Equipment" or with approved standards.
- (3) All apparatus and wiring within 50 feet shall be inspected after installation and at least once annually by a competent Electrical Engineer and the licensee shall carry out immediately any repairs and adjustments found necessary and shall furnish to the Port Engineer as soon as possible after each inspection a certificate that the apparatus and wiring comply with approved standards.
- (4) All electric apparatus and wiring shall be non-sparking, that is apparatus such that in normal operation will not produce open sparking capable of igniting inflammable vapour and the wiring shall comply with approved standards.
- (5) Where the Port Engineer so requires all portable electric apparatus, hand lamps and the wiring thereto shall conform to approved standards.
- (6) No work shall be done on any apparatus or wiring nor shall the flameproof enclosure of any apparatus be opened until all current has

first been cut off from the said apparatus or wiring and the current shall not be restored until the work has been completed and/or the flameproof enclosure completely reclosed so as to restore its flameproof features.

**71. Fire Precautions; General**

Every precaution shall be taken by the licensee and his employees and persons resorting to the licensed premises by his permission to prevent accidents which could result in explosion or fire.

**72. Fire Precautions, Water Cooling of Tanks**

Tanks containing Class A petroleum and immediately adjacent tanks shall be provided with water nozzles of approved design capable of ensuring that water covers the whole of the roof and sides of the tanks for cooling purposes. There shall be available on licensed premises a suitable portable pump or in each moat a controlled outlet or outlets or other apparatus capable of disposing of, within a reasonable period, any water trapped in the moat as a result of fire fighting or tank cooling operations. Details of any such apparatus shall be submitted to and shall be subject to the approval of the Port Engineer.

**73. Fire Precautions, Appliances, Personnel**

- (a) Fire-fighting appliances in such quantity and number and of such type and specification as may be required or approved by the Port Engineer shall be kept and maintained in readily accessible places throughout the licensed premises. The Port Engineer may indicate approval either for specific appliances or generally for appliances of such type or types as shall conform to standards approved in respect of specified comparable storage, installations situated elsewhere or to approved standards.
- (b) A plan showing the number and position of all fire-fighting appliances and water hydrants shall be displayed at or near the main entrance of the licensed premises.
- (c) The licensee shall implement the recommendations of approved standards relating to fire-fighting personnel.
- (d) The water pipes connecting the Dublin Corporation water mains with the licensed premises shall be of a diameter to be approved by the Port Engineer.
- (e) The Port Engineer and the Harbour Master shall have power to require the licensees to co-operate with them in the holding of fire drills from time to time, provided that such drills shall not exceed four in number in any year.

74. **Fire, Flame, Heat, (On licensed Premises)**

Fire, flame, heat or appliance capable of causing a spark shall not be allowed on licensed premises within 50 feet of any building or place where a concentration of inflammable vapour may occur without the consent in writing of the Port Engineer and then only subject to such safeguards as may be approved by him.

75. **Smoking**

- (a) No person shall smoke or be allowed to smoke on licensed premises except in such building or buildings and subject to such conditions as may be approved in writing by the Port Engineer.
- (b) In those buildings in licensed premises where smoking is allowed satisfactory means of ignition shall be provided and shall be of a type which cannot be removed.
- (c) No person shall smoke outside licensed premises within 100 feet of any building or place where a concentration of inflammable vapour may occur.

76. **Matches**

Matches or other means of obtaining an unprotected flame or light shall not be brought into licensed premises and suitable arrangements shall be made for the safe custody of these articles at the entrance gate; provided that safety matches may be kept in a suitable receptacle in any building in which a fire, flame or artificial light may be allowed under these Bye-Laws, such matches to be brought into the premises only by a responsible officer under a written authority of the manager of the premises and kept in charge of a responsible member of the licensee's staff.

77. **Refining Petroleum**

If the operation of refining petroleum is carried out on licensed premises the whole of the refining apparatus including buildings, storage tanks, plant and equipment shall be constructed, maintained and operated in accordance with approved standards.

78. **Prevention of Escape of Petroleum**

Interceptors or other method approved by the Port Engineer shall be provided and maintained by the licensee so that no petroleum refined derivatives thereof, wastes or residue shall escape from licensed premises or enter any drains or sewers connected with the waters of the Harbour or any Dock or Basin connected therewith.

79. **Objectionable Vapour**

No objectionable vapour shall be so discharged as to cause a nuisance.

80. **Liquefied Petroleum Gas**

No vehicle carrying liquefied petroleum gas except in special safe containers of a type approved by the Board shall in any circumstances be allowed upon licensed premises or within 100 feet of where a concentration of inflammable vapour may occur.