AN ACT FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1993

A MARITIME LEGISLATION DRAFTING PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF LAWS DEGREE (LL.M.)

AT THE

IMO INTERNATIONAL MARITIME LAW INSTITUTE (I.M.L.I.) M A L T A

MAY 1993

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DRAFTING INSTRUCTIONS

The discovery of crude oil in commercial quantities in the Tano Basin and off the coast of the Central Region means that Ghana will soon be an oil exporting country. Consequently, tanker traffic to and from Ghana will increase considerably. With this increase, the dangers of pollution of the marine environment by oil resulting from tankers will also increase considerably. It is therefore necessary to have an effective oil pollution prevention legislations which will greatly minimize the threat of this danger. The current Oil Pollution Prevention Ordinance of 1955 is based primarily on the 1954 OILPOL Convention. The object of this Ordinance was primarily aimed at pollution from routine tanker operations and discharge of oily wastes from machinery space. Furthermore, the definition of oil as found in Section 2 of the Ordinance was inadequate to cover all persistent and non-persistent oil. The inadequacies of the Conventions upon which the Ordinance is based led to its amendment in 1962 and other further amendments. However, our enactments or law has not covered any of those subsequent amendments. Consequently, the current law on prevention of pollution from oil is woefully inadequate to prevent pollution from tankers as they operate today.

These and many other concerns necessitates the urgent need for an oil pollution prevention legislation. The Parliamentary Sub-Committee on legislation has therefore required that an effective pollution prevention legislation be drafted for enactment.

You are therefore required to prepare a draft law on the following drafting instructions: your basic source is the 1973 MARPOL especially Annex I, dealing with the prevention of pollution from oil. This annex has been amended and I attach herewith the main conventions including all the annexes and the amendment to the said Annex 1 for your information and guidance. It needs to be borne in mind, however, that Ghana in ratifying the convention made a reservation in respect of regulation 12. This deals with the provisions of reception facilities at the ports. The legal effect of such a reservation is that said Article 12 is non-binding on Ghana. Consequently, you are not to include this provision in the draft law.

The Law Reform Commission has decided that you prepare a main draft act based only to Annex I to MARPOL. This should be a short act. Then you prepare a regulation accompanying the main draft act and subsequently when it becomes necessary a second set of regulations. Your structure for the draft law would therefore be as follows:

(a) Main Act: This is based on Regulations 1, 2, 3, 4, 5 and 8;

(b)<u>Regulations</u>: This is based on Regulations 9, 11, 14, 15, 16, 17, 18 and 20;

(c)Future Regulations: Should be based on Regulations 13, 21-25.

It is necessary to have part of the law in the form of regulations because essentially they cover technical details and sometimes complex mathematical calculations which are best catered for in regulations which can be changed or amended without resorts to Parliament any time an amendment is required. Amendments to these regulations will come as a matter of course when new technology for construction of tankers and prevention of pollution increase.

In the draft act the definition section should be applicable to the regulations and a new definition section should be provided in the regulations only insofar as they are exclusively applicable to the regulations.

You are required to comply with the definition section regarding a ship and what oil is covered under the act. The definition is so extensive as to be able to cater for our present national aspirations. The application of the act should be a reflection of the provisions of said Annex I.

To further attain the purpose of the act, it is necessary that ships to which the act applies must be provided or hold an International Oil Pollution Certificate (IOPP). This certificate must be issued upon an initial survey and sustained by annual and intermediate surveys. In this regard, the act must make provisions for initial surveys, annual surveys and intermediate surveys.

(a) The act must require that before and IOPP Certificate is issued the vessel must be surveyed. This survey should relate to the technical details as to design and construction and also to ensure that the ship complies with the relevant provisions of the act and their regulations regarding, for example, a confirmation that the ship has the Oil Record Book, manuals and other documents.

- (b) The annual survey should involve a general examination of the ship and its equipment. This should be done annually during the duration of the IOPP Certificates.
- (c) Intermediate survey is required to ensure that the ships maintain the their class between the annual surveys. This is essentially required where the Certificate is for a one certificate validity period in which it must be held not later than six months after the half-way date of the certificate validity period.

Every IOPP Certificate should be of a five-year duration after which it must be renewed. For a renewal a system of thorough survey provisions should be instituted to ensure that a vessel is fit for the IOPP Certificate.

To ensure that these surveys are competently done, the Minister

must have the sole capacity of designating surveyors for these particular surveys. However, the Minister does not assume any responsibility for designating the surveyors and, therefore, any provision in the Annex to the effect that the Minister or the Government shall be responsible for deficiencies of the survey must not be given effect to. The shipowners take personal responsibilities for the fitness of their vessels.

Furthermore, the acts and regulations should make adequate and elaborate provisions for the prevention of the discharge of oil into the marine environment. However, there are specific accepted situations which must be complied with our Act and Regulations:

- (a) Where the ship is not within a special area and where the ship is more than 12 miles from the nearest land and it is en route and the ship has in operation an oil discharge monitoring and control system, and oily-water separating equipment and other useful installations; and
- (b) for an oil tanker, the tanker is not within a special area and a tanker is more than 50 miles from the nearest land and the tanker is proceeding en route. The detailed provisions in said Annex must be meticulously complied with.

Although the discharge of oil is prohibited, unless the exceptions provided for in the above paragraphs, the Regulations must provide for exceptional cases where discharge will be accepted. The prime object is that under certain circumstances, the interest to save life or the vessel itself and also in cases of accident may override the desire to protect the marine environment and must, therefore, be provided for as exceptions against the prohibitions. However, in cases of accidents the vessel would be accepted if it has on board a valid IOPP Certificate.

The Regulations must also prohibit the carriage of ballast water in fuel tanks. This should apply to:

(a)new ships of 4,000 tons gross tonnage and above other than oil tankers; and

(b)new oil tankers of 150 tons gross tonnage and above.

However, there can be exceptional circumstances where the above provisions would not be applicable and the Regulations must identify and cater for these situations. Furthermore, provisions should be made for the discharge of such ballast water, for instance, discharge into the sea.

For tankers used to carry oil, slop would be generated by tank washing and dirty ballast residues. There should, therefore, be provisions relating to slop tanks which will contain the slop so generated. There should also be further provisions to require the retention of slop generated by tank washing, oil residues and dirty ballast residues on board slop tanks. Furthermore, oil discharge monitoring and control system and oil water separating and oil filtering equipment are necessary provisions in the Regulations.

Finally, it is desirable and absolutely necessary that all ships to reach the Act applies must have an Oil Record Book. This book should be completed among others for loading of oil cargo and a discharge of oil including the discharge of residue. This must be a valuable document which should be admissible in evidence. It must be properly executed. It is recommended that all the provisions under the Annex relating to the Oil Record Book be included in the Regulations.

AN ACT FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1993 BE IT ENACTED AS FOLLOWS:

Short title and1. This Act may be cited as the Oil commencement. Pollution Prevention Act and shall come into force on the date of gazette notification.

Interpretation.2. In this Act, unless specifically provided otherwise

"Harmful Substance" means any substance which, if introduced into the sea, is liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea, and includes any substance subject to control by this Act.

"Discharge" -

(a) in relation to harmful substances or effluents containing such substances, means any release howsoever caused from a ship and includes any escape, disposal, spilling, leaking, pumping, emitting or emptying;

(b) does not include:

- (i) dumping within the meaning of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, done at London on 13 November 1972; or
 - (ii)release of harmful substances directly arising from the exploration, exploitation and associated off-shore processing of sea-bed mineral resources; or
 - (iii)release of harmful substances for purposes of legitimate scientific research into pollution abatement or control.
- "Ship" means a vessel of any type whatsoever operating in the marine environment and includes hydrofoil boats, air-cushion vehicles, submersibles, floating craft and fixed or floating platforms.

"Minister" means the Minister for Environmental Protection.

"Incident" means an event involving the actual or probable discharge into the sea of a harmful substance or effluent.

"Organization" means International Maritime Organization.

"Oil" means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products (other than petrochemicals which are subject to the provisions of Annex II International Convention for the Prevention of Pollution from Ships, 1973 (MARPOL), and without limiting the generality of the foregoing, includes the substances listed in Appendix 1 to the Act.

"Oily mixture" means a mixture with any oil content.

- "Oil fuel" means any oil used as fuel in connection with the propulsion and auxiliary machinery of the ship in which such oil is carried.
- "Oil tanker" means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers and any "chemical tanker" as defined in Annex II of MARPOL when it is carrying a cargo or part cargo of oil in bulk.
- "Combination Carrier" means a ship designed to carry either oil or solid cargoes in bulk.

"New Ship" means a ship:

- (b) in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction after 30 June 1976; or
- (c) the delivery of which is after 31 December 1979; or
- (d) which has undergone a major conversion:
- (i) for which the contract is placed after 31 December 1975; or(ii) which is completed after 31 December 1979.
- (a) "Major Conversion" means a conversion of an existing ship:
- (i) which substantially alters the dimensions or carrying capacity of the ship; or
 - (ii) which changes the type of the ship; or
 - (iii) the intent of which in the opinion of the Minister is substantially to prolong its life; or
 - (iv)which otherwise so alters the ship that, if it were a new ship, it would become subject to relevant provisions of this Act not applicable to it as on existing ship.

(b)Notwithstanding the provisions of sub-section (a) of this section, conversion of an existing oil tanker

of 20,000 tons deadweight and above to meet the requirements of Section 13 shall not be deemed to constitute a major conversion for the purposes of this Act.

- "Nearest Land" the term "from the nearest land" means from the baseline from which the territorial sea of the territory in question is established in accordance with international law.
- "Instantaneous rate of discharge of oil content" means the rate of discharge of oil in litres per hour at any instant divided by the speed of the ship in knots at the same instant.
- "Tank" means an enclosed space which is formed by the permanent structure of a ship and which is designed for the carriage of liquid in bulk.
- "Slop tank" means a tank specifically designated for the collection of tank drainings, tank washing and other oily mixtures.
- "Clean ballast" means the ballast in a tank which since oil was last carried therein, has been so cleaned that effluent therefrom if it were discharged from a ship which is stationary into clean calm water on a clear day would not produce visible traces of oil on the surface of the water or on adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. If the ballast is discharged through an oil discharge monitoring and control system approved by the Minister, evidence based on such a system to the effect that the oil content of the effluent did not exceed 15 parts per million shall be determinative that the ballast was clean, notwithstanding the presence of visible traces.
- "Segregated ballast" means the ballast water introduced into a tank which is completely separated from the cargo oil and oil fuel system and which is permanently allocated to the carriage of ballast or cargoes or other than oil or noxious as variously defined in this Act.
- "Deadweight" (DW) means the difference in metric tons between the displacement of a ship in water of a specific gravity of 1.025 at the load waterline corresponding to the assigned summer freeboard and the lightweight of the ship.
- "Lightweight" means the displacement of a ship in metric tons without cargo, fuel, lubricating oil, ballast water, fresh water and feed water in tanks, consumable stores, and passengers and crew and their effect.

"Officers" means the Harbour Master.

PART II

Application. 3.(1)Unless expressly provided otherwise, this Act shall apply to all ships;

(2) In ships other than oil tankers

- fitted with cargo spaces which are constructed and utilized to carry oil in bulk of an aggregate capacity of 200 cubic metres or more, the requirements of the Pollution Regulations for oil tankers shall also apply to the construction and operation of those spaces, except that where such aggregate capacity is less than 1,000 cubic metres the requirements of Section , may apply in lieu of Section .
 - (a) Any hydrofoil, air-cushion vehicle and other new type of vessel (near-surface craft, submarine craft, etc.) whose constructional features are such as to render the application of any of the provisions of the Pollution Regulations relating to construction and equipment unreasonable or impracticable may be exempted by the Minister from such provisions, provided that the construction and equipment of that ship provides equivalent protection against pollution by oil, having regard to the service for which it is intended.
- (b) Particulars of any such exemption granted by the Minister shall be indicated in the Certificate referred to in section 5.
- Equivalent.4.(1) The Minister may allow any fitting, material, appliance or apparatus to be fitted in a ship as an alternative to that required by the Act if such fitting, material, appliance or apparatus is at least as effective as that required by this Act. This authority shall not extend to substitution of operational methods to effect the control of discharge of oil as equivalent to those design and constructional features which are prescribed by the relevant provisions of this Act.

Surveys and 5.(1) Every oil tanker of 150 tons gross

- inspections.tonnage and above, and every other ship of 400 tons gross tonnage and above shall be subject to the surveys specified below:
- (a) an initial survey before the ship is put in service of before the certificate required under section 6 of this Act is issued for the first time;
- (b) periodical surveys at intervals not exceeding five years;
- (c) a minimum of one intermediate survey during the period of validity of the Certificate. In case where only one such intermediate survey is carried out in any one certificate validity period, it shall be held not before six months prior to, nor later than six months after the half-day date of the Certificates's period of validity. Such intermediate surveys shall be endorsed on the certificate used under section 6;
- (d) the surveys shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with requirements of this Act.

- (2) The Minister shall by regulation establish appropriate measures for ships which are not subject to the provisions of sub-section(1) in order to ensure that the applicable provisions of this Act are complied with.
- (3) The Minister shall institute arrangements for unscheduled inspections to be carried out during the period of validity of the Certificate. Such inspections shall ensure that the ship and its equipment remain in all respects satisfactory for the service for which the ship is intended.
- (4) The Minister shall appoint surveyors for the purposes of this Act.
- (a) The surveyor(s) have power to require repairs to a ship.
- (5) When a surveyor determines that the condition of the ship does not correspond substantially with the particulars of the certificate or is such that the ship is not fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment, such surveyor shall immediately ensure that corrective action is taken and shall in due course notify the Minister. If such corrective action is not taken the certificate would be withdrawn. Where necessary, the Minister shall take such steps as will ensure that the ship shall not sail until it can proceed to sea or leave the port for the purpose of proceeding to the nearest appropriate repair yard available without presenting an unreasonable threat of harm to the marine environment.
- (5) (a) The condition of the ship and its equipment shall be mountained to conform with the provisions of the Act to ensure that the ship in all respects will remain fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment.
- (b)After any survey of the ship under sub-section (a) has been completed, no change shall be made in the structure, equipment, systems, fitting, arrangements or material covered by the survey, without the sanction of the Minister, except the direct replacement of such equipment and fittings.
- (c)Whenever an accident occurs to a ship or a defect is discovered which substantially affects the integrity of the ship or the efficiency or completeness of its equipment covered by this Act the master or owner of the ship shall report at the earliest opportunity to the Minister who shall cause investigation to be initiated to determine whether a survey as required by sub-section (1) is necessary.

Issue of 6.(1) An International Oil Pollution

Certificate.Prevention Certificate shall be issued, after survey in accordance with the provisions of section 4 to any oil tanker

of 150 tons gross tonnage and above and any other ships of 400 tons gross tonnage and above which are engaged in voyages to Ghanaian ports or off-shore terminals. In the case of existing ships, this requirement shall apply twelve months after the date of entry into force of this Act.

- (2) Such certificate shall be issued by the Minister when he is satisfied that the relevant provisions of Section 4 have been complied with.
- (3) Sub-section 2 does not relieve any vessel of the responsibility of complying with this Act.

Form of 7. The International Oil Pollution

Certificate.Prevention Certificate shall be drawn up in the form corresponding to the model in appendix (1).

Duration of8.(1) An International Oil Pollution

- Certificate. Prevention Certificate shall be issued for a five year period from the date of issue, provided that in the case of an oil tanker operating with dedicated clean ballast tanks for a limited period specified in the Pollution Regulations, the period of validity of the Certificate shall not exceed five years.
- (2) A Certificate shall cease to be valid if significant alterations have taken place in the construction, equipment, systems, fittings, or if intermediate survey as specified by the Minister under section 4 sub-section 6(3) are carried out.
- (3) A Certificate issued shall also cease to be valid upon transfer of the ship to the flag of another state.

PART III REGULATIONS

9.(1) The Minister may by legislative instrument make regulations for the prevention of pollution for all or any of the following purposes:

(a) control of discharge of oil; (b) methods for the prevention of pollution from ships while operating in special areas; (c)port reception facilities for oil; (d) segregated ballast oil tankers; (e) segregation of oil and water ballast; (f) retention of oil on board; (g)oil discharge monitoring and control system and oily-water separating equipment; (h) tanks for oil residues (sludge) (i)pumping, piping and discharge arrangements of oil tankers; (j) standard discharge connection; (k)Oil Record Books; (1) special requirements for drilling rigs and other platforms; (m) damage assumption; hypothetical outflow of oil; (n)limitation of size and arrangement of cargo tanks; (0)8 subdivisions and stability of

tanks.

PART IV MISCELLANEOUS

Repeal and saving.10.(1) The Oil Pollution Ordinance (1955) is hereby

repealed.

(2) Notwithstanding the repeal of the said Ordinance, every instrument made there under or deemed to be made there under and in force immediately before the commencement of this Act shall, until altered, revoked or modified under this Act, continue in force as if made under the corresponding provisions of this Act, with such modifications as may be necessary having regard to the provisions of this Act.

DATE of Gazette notification; , 1993

POLLUTION REGULATIONS, 1993

In exercise of the powers conferred upon the Minister by section 9 of the Oil Pollution Prevention Act 1993 (Act), these Regulations are made this 14th day of May, 1993.

PART I REQUIREMENTS FOR CONTROL OF OPERATIONAL POLLUTION

Control of 1.(1) Subject to the provisions of

- discharge of oil. regulation 2 any discharge into the sea of oil or oily mixtures from ships to which these Regulations apply shall be prohibited except when all the following conditions are satisfied:
- (a) for an oil tanker, except as provided for in sub-section 1(b):(i) the tanker is not within a special area;
 - (ii) the tanker is more than 50 nautical miles from the nearest land;

(iii) the tanker is proceeding en route;

(iv) the instantaneous rate of discharge of oil content does not exceed 60 litres per nautical mile;

(v) the total quantity of oil discharged into the sea does not exceed for existing tankers 1/15,000 of the total quantity of the particular cargo of which the residue formed a part, and for new tankers 1/130,000 of the total quantity of the particular cargo of which the residue formed a part; and

(vi)the tanker has in operation except as provided for in Regulation 4(3) an oil discharge monitoring and control system and a slop tank arrangement as required by Regulation 4.

(b) from a ship of 400 tons gross tonnage and above other than an oil

tanker and from machinery space bilges excluding cargo pump room bilges of an oil tanker unless mixed with oil cargo residue: (i)the ship is not within a special area;

(ii) the ship is more than 12 nautical miles from the nearest land;

(iii) the ship is proceeding en route;

(iv) the oil content of the effluent is less than 100 parts per million; and

- (v) the ship has in operation an oil discharge monitoring and control system, oily water separating equipment, oil filtering system or other installation as required by Regulation 4.
- (2) A ship of less than 400 tons gross tonnage other than an oil tanker whilst outside the special area, shall be equipped as far as practicable and reasonable with installation to ensure the storage of oil residues on board and their discharge to reception facilities or into the sea in compliance with sub-section (1) (b).
- (3) The provisions of sub-section (1) shall not apply to the discharge of clean or segregated ballast. The provisions of sub-regulation (1) (b) shall not apply to the discharge of oily mixture which without dilution has an oil content not exceeding 15 parts per million.
- (4) No discharge into the sea shall contain chemicals or other substances in quantities or concentrations which are hazardous to the marine environment or chemicals or other substances introduced for the purpose of circumventing the conditions of discharge specified in this Regulations.
- (5) The oil residue which cannot be discharged into the sea in compliance with sub-regulations (1), (2) and (4) shall be retained on board or discharged to reception facilities.

Exceptions.2.Section 1 shall not apply to:

- (a) the discharge into the sea of oil or oily mixture necessary for the purpose of securing the safety of a ship or saving life at sea; or
- (b) the discharge into the sea of oil or oily mixture resulting from damage to a ship or its equipment.
- (i) provided that all reasonable precautions have been taken after the occurrence of the damage or discovery of the discharge for the purpose of preventing or minimizing the discharge; and(ii) except if the owner or Master acted with either intent to cause damage, or recklessly and with knowledge that damage would probably result; or
- (c) the discharge into the sea of substances containing oil, approved by the Minister when being used for the purpose of embalming specific pollution incidents in order to minimize the damage from pollution.

Segregation of oil3.(1) Except as provided otherwise in

- and water ballast.these Regulations in new ships of 4,000 tons gross tonnage and above other than oil tankers, and in new oil tankers of 150 tons gross tonnage and above, no ballast water shall be carried in any oil fuel tank.
- (2) Where abnormal conditions or the need to carry large quantities of oil fuel render it necessary to carry ballast water which is not clean ballast in any oil fuel tank, such ballast water shall be discharged to reception facilities or into the sea in compliance with Regulation 1 using the equipment specified in Regulation 5 and an entry shall be made in the Oil Record Book to this effect.
- (3) All other ships shall comply with the requirements of sub-section(1) as far as reasonable and practicable.

Retention of oil4.(1) Subject to the provisions of sub-

- on board.section (5) and (6), oil tankers of 150 tons gross tonnage and above shall be provided with arrangements in accordance with the requirements of sub-section (2) and (3), provided that in each case of existing tankers the requirements for oil discharge monitoring and control systems and slop tank arrangements shall apply three years after the date of entry into force of these Regulations.
- (2) (a) Adequate means shall be provided for cleaning the cargo tanks and transferring the dirty ballast residue and tank washing from cargo tanks into a slop tank approved by the Minister. In existing oil tankers, any cargo tank may be designated as a slop tank.
- (b) In this system, arrangements shall be provided to transfer the oily waste into a slop tank or combination slop tank in such a way that any effluent discharged into the sea will be such as to comply with the provisions of Regulation 1.

(c) The arrangement of the slop tank or

- combination of slop tanks shall have a capacity necessary to retain the slop generated by tank washing, oil residues and dirty ballast residues but the total shall not be less than 3 per cent of the oil carrying capacity of the ship, except that, where arrangements such as educators involving the use of water additional to the washing water are not fitted, the Minister may accept 2 per cent. Now oil tankers over 70,000 tons deadweight shall be provided with at least two slop tanks.
- (d)Slop tanks shall be so designed particularly in respect of the position of inlets, outlets, battles or wars where fitted, so as to avoid excessive turbulence and entertainment of oil or emulsion with water.

- (3) (a) An oil discharge monitoring and control system approved by the Minister shall be fitted. The system shall be fitted with a recording device to provide a continuous record of the discharge in litres per nautical mile and total quantity discharged, or the oil content and rate of discharge. The record shall be identifiable as to time and date and shall be kept for at least three years. The oil discharge monitor and control system shall come into operation when there is any discharge of effluent into the sea and shall be such as will ensure that any discharge of oily mixture is automatically stopped when the instantaneous rate of discharge of oil exceeds that permitted by Regulation 1(a). Any failure of the monitoring and control system shall stop the discharge and be noted in the Oil Record Book. A manually operated alternative method shall be provided and may be used in the event of such failure, but the defective unit shall be made operable before the oil tanker commences its next ballast voyage unless it is proceeding to repair port. Existing oil tankers shall comply with all the provisions specified above except that the slopping of the discharge may be performed manually and the rate of discharge may be estimated from the pump characteristic.
- (b) Effective oil/water interface detectors approved by the Minister shall be provided for a rapid and accurate determination of the oil/water interface in slop tanks and shall be available for use in other tanks where the separation of oil and water is effected and from which it is intended to discharge effluent direct to the sea.
- (c)Instructions as to the operation of the system shall be in accordance with an operational manual approved by the Minister. They shall cover manual as well as automatic operations and shall be intended to ensure that at not time shall oil be discharged except in compliance with the conditions specified in Regulation 1.
- (4) The requirements of sub-regulations (1) and (2) shall not apply to oil tankers of less than 100 tons gross tonnage, for which the control of discharge of oil under Regulation 1 shall be effected by the retention of oil on board with subsequent discharge of all contaminated washing to reception facilities. The total quantity of oil and water used for washing and returned to a storage tank shall be recorded in the Oil Record Book. This total quantity shall be discharged to reception facilities unless adequate arrangements are made to ensure that any effluent which is allowed to be discharged into the sea is effectively monitored to ensure that the provisions of Regulation 1 are complied with.
- (5) The Minister may waive the requirements of sub-sections (1), (2) and (3) for any oil tanker which engages exclusively on voyages both of 72 hours or less in duration and within 50 miles from the nearest land, provided that the oil tanker is not required to hold and does not hold an International Oil Pollution

Prevention Certificate. Any such waiver shall be subject to the requirement that the oil tanker shall retain on board all oily mixtures for subsequent discharge to reception facilities and to the determination by the Minister that such facilities available to receive such oily mixtures are adequate.

- (6) Where in the view of the Minister equipment required by Regulation 1 (1) (a) (vi) and specified in sub-section (3) (a) is not obtainable for the monitoring of discharge of light refined products (white oils) the Minister may waive compliance with such requirement, provided that discharge shall be permitted only in compliance with procedures established by the Minister which shall satisfy the conditions of control system in operation. The Minister shall review the availability of equipment at intervals not exceeding twelve months.
- (7) The requirements of sub-sections (1), (2) and (3), shall not apply to oil tankers carrying asphalt, for which the control of discharge of asphalt under Regulation 23 shall be effected by the retention of asphalt residues on board with discharge of all contaminated washing to reception facilities.

Oil discharge and5.(1) Any ship of 400 tons gross tonnage control system andand above shall be fitted with an oilyoily water water separating equipment or filtering separating system complying with the provisions of equipment.sub-section (6). Any such ship which carries large quantities of oil fuel shall comply with sub-regulation (2) of Regulation 3.

(2) Any ship of 10,000 tons gross tonnage and above shall be fitted:(a) in addition to sub-section (1) with an oil discharge and monitoring and control system complying with sub-regulation (5); or

- (b) as an alternative to the requirements of sub-section (1) and sub-regulation (2) (a), with an oily-water separating equipment complying with sub-section (6) and an effective filtering system, complying with sub-regulation (7).
- (3) The Minister shall ensure that ships of less than 400 tons gross tonnage are equipped, as far as practicable, to retain on board oil or oily mixture or discharge them in accordance with the requirements of Regulation 12 (1).
- (4) For existing ships the requirements of sub-sections (1), (2) and (3) shall apply three years after the date of entry into force of this Act.
- (5) An oil discharge monitoring and control system shall be of a design approved by the Minister. The system shall be fitted with a recording device to provide a continuous record of the oil content in parts per million. This record shall be

identifiable as to time and date and shall be kept for at least three years. The monitoring and control system shall come into operation when there is any discharge of effluent into the sea and shall be such as will ensure that any discharge of oily mixture is automatically stopped when the oil content of effluent exceeds that permitted by Regulation 12(1)(b). Any failure of this monitoring and control system shall stop the discharge and be noted in the Oil Record Book. The defective unit shall be made operable before the ship commences its next voyage unless it is proceeding to a repair port. Existing ships shall comply with all of the provisions specified above except that the stopping of the discharge may be performed manually.

- (6) Oily-water separating equipment or an oil filtering system shall be of a design approved by the Minister and shall be such as will ensure that any oil mixture discharged into the sea after passing through the separator or filtering systems shall have an oil content of not more than 100 parts per million.
- (7) The oil filtering system referred to in sub-regulation (2) (b) shall be of a design approved by the Minister and shall be such that it will accept the discharge from the separating system and produce an effluent the oil content of which does not exceed 15 parts per million. It shall be provided with an alarm arrangements to indicate when this level cannot be maintained.

Tanks for oil6.(1) Every ship of 400 tons gross

- residues (sludge). tonnage and above shall be provided with a tank or tanks of adequate capacity, having regard to the type of machinery and length of voyage, to receive the oily residues (sludge) which cannot be dealt with otherwise in accordance with the requirements of this Regulation, such as those resulting from the purification of fuel and lubricating oils and oil leakages in the machinery spaces.
- (2) In new ships, such tanks shall be designed and constructed so as to facilitate their cleaning and discharge of residues to reception facilities. Existing ships shall comply with this requirements as far as is reasonable and practicable.

Pumping, piping 7.(1) In every oil tanker, a discharge and discharge manifold for connection to reception arrangements offacilities for the discharge of dirty oil tankers.ballast water or oil contaminated water shall be located on the open deck on both sides of the ship.

(2) In every oil tanker, pipelines for the discharge to the sea of effluent which may be permitted under Regulation 1 shall be led to the open deck or the ship's side above the water line in the deepest ballast condition. Different piping arrangements to permit operation in the manner permitted in sub-regulations 4 (a) and (b) of this Regulation may be accepted.

- (3) In new oil tankers means shall be provided for stopping the discharge of effluent into the sea from a position on upper deck or above located so that the manifold in use referred to in sub-regulation (1) of this section and the effluent from the pipelines referred to in sub-regulation (2) of this section may be visually observed. Means for stopping the discharge need not be provided at the observation position if positive communications systems such as telephone or radio system is provided between the observation position and the discharge control position.
- (4)All discharges shall take place above the waterline except as follows:
- (a) segregated ballast and clean ballast may be discharged below the water line in ports as at offshore terminals;
- (b) existing ships which, without modification, are not capable of discharging segregated ballast above the waterline may discharge segregated ballast below the waterline provided that an examination of the tank immediately before the discharge has established that no contamination with oil has taken place.
- (5) Every new oil tanker required to be provided with segregated ballast tanks, or fitted with a crude oil washing system shall comply with the following requirements:
- (a) it shall be equipped with oil piping so designed and installed such that oil retention in the lines is minimized; and
- (b) means shall be provided to drain all cargo pumps and all oil lines at the completion of cargo discharge, where necessary by connection to a stripping device. The line and pump drainings shall be capable of being discharged both ashore and to a cargo tank or a slop tank. For discharge ashore a special small diameter he shall be provided for that purpose and connected outboard of the ship's manifold values.
- (b) Every existing crude oil carrier required to be provided with segregated ballast tanks, or fitted with a crude oil washing system or operated with dedicated clean ballast tanks, shall comply with the provisions of sub-section (5) (b).

Oil Record Book.8.(1) Every oil tanker of 150 tons gross

- tonnage and above other than an oil tanker shall be provided with an Oil Record Book, whether as part of the ship's official log book or otherwise, in the form specified in Appendix I to this Regulation.
- (2) The Oil Record Book shall be completed on each occasion, on a tank-to-tank basis, whenever any of the following operations take place in the ship:

(a) For oil tankers (i)loading of oil cargo; (ii) internal transfer of oil cargo during voyage; (iii) opening or closing before and after loading and unloading operations of values or similar devices which inter-connect cargo tanks; (iv) opening or closing of means of communication between cargo piping and sea water ballast piping; (v) opening or closing of ship's side value before, during and after loading and unloading operations; (vi)unloading of oil cargo; (vii) ballasting of cargo tanks; (viii) cleaning of cargo tanks; (ix) discharge of ballast except from segregated ballast tanks; (x) discharge of water from slop tanks; (xi)disposal of residues; (xii) discharge overboard of bilge water which has been accumulated in machinery spaces whilst in port, and the routine discharge at sea of bilge water which has accumulated in machinery spaces. (b) For ships other than oil tankers (i)ballasting or cleaning of fuel tanks or oil cargo spaces; (ii) discharge of ballast or cleaning water from tanks referred to under (1) of this sub-section; (iii) disposal of residues; (iv) discharge overboard of bilge water which has accumulated in machinery spaces whilst on port, and the routine discharge at sea of bilge water which has accumulated in machinery spaces. In the event of such discharge of oil or oily mixture as is (3) referred to in Regulation 2 or in he event of accidental or other exceptional discharge of oil not excepted by that article, a statement shall be made in the Oil Record Book of the

(4) Each operation described in sub-section (2) of this section shall be fully recorded without delay in the Oil Record Book so that all the entries in the book appropriate to that operating are completed. Each section of the book shall be signed by the officer or officers in charge of the operations concerned and shall be counter signed by the Master of the ship.

circumstances of, and the reasons for, the discharge.

- (5) The Oil Record Book shall be kept in such a place as to be readily available for inspection of all reasonable lines and, except in the case of unmanned ships under tow, shall be kept on board the ship. It shall be preserved for a period of three years after the last entry has been made.
- (6) The officer may inspect the Oil Record Book on board any ship to which this Act applies while the ship is in the port or offshore terminals and may make a copy of any entry in that book and may

require the Master of the ship to certify that the copy is a true copy of such entry. Any copy so made which has been certified by the Master of the ship as a true copy of an entry in the ship's Oil Record Book shall be admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of an Oil Record Book and the tacking of a certified copy by the officer under this section shall be performed as expeditiously possible without causing the ship to be unduly delayed.

Commencement.9. These Regulations shall be deemed to have come into operation on the 1st day of January 1993.

Minister for Environment