SEA POLLUTION (PREVENTION OF OIL POLLUTION) REGULATIONS 1994

ARRANGEMENT OF REGULATIONS

PART I

General

Regulation

- 1. Citation and commencement.
- 2. Interpretation.
- 3. Application.
- 4. Equivalents.
- 5. Surveys.
- 6. Issue or endorsement of certificate.
- 7. Issue or endorsement of certificate by another Government.
- 8. Form of certificate.

9. Duration and validity of certificate.

PART II

Requirements for control of operational pollution

10. Control of discharge of oil.

- 11. Methods for the prevention of oil pollution from ships while
- operating in special areas.
- 12. Reception facilities.

13. Segregated ballast tanks, dedicated clean ballast tanks and crude oil washing.

13A. Requirements for oil tankers with dedicated clean ballast tanks.

13B. Requirements for crude oil washing.

13C. Existing tankers engaged in specific trades.

13D. Existing oil tankers having special ballast arrangements.

13E. Protective location of segregated ballast spaces.

13F. Prevention of oil pollution in the event of collision or stranding.

13G. Measures for existing tankers for the prevention of oil pollution in the event of collision or stranding.

14. Segregation of oil and water ballast and carriage of oil in forepeak tanks.

15. Retention of oil on board.

16. Oil discharge monitoring and control system and oil filtering equipment.

17. Tanks for oil residues (sludge).

18. Pumping, piping and discharge arrangements of oil tankers.

19. Standard discharge connection.

20. Oil record book.

21. Special requirements for drilling rigs and other platforms.

PART III

Requirements for minimising oil pollution from oil tankers due to side and bottom damages

22. Damage assumptions.

23. Hypothetical outflow of oil.

24. Limitation of size and arrangement of cargo tanks.

25. Subdivision and stability.

PART IV

Prevention of pollution arising from an oil pollution incident 26. Shipboard oil pollution emergency plan. SCHEDULES FIRST SCHEDULE List of oils SECOND SCHEDULE Form of International Oil Pollution Prevention Certificate (IOPP Certificate) THIRD SCHEDULE. Form of Oil Record Book. S.I. No. 44 of 1994.

I, DAVID ANDREWS, Minister for the Marine, in exercise of the powers conferred on me by sections 10 of the Sea Pollution Act, 1991 (No. 27 of 1991), and for the purpose of giving effect to Annex I of the MARPOL Convention, hereby make the following Regulations:

PART I

General

REG 1

Citation and commencement.

1. These Regulations may be cited as the Sea Pollution (Prevention of Oil Pollution) Regulations, 1994 and shall come into operation on the 1st day of June, 1994.

REG 2

Interpretation.

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

"the Act" means the Sea Pollution Act, 1991 (No. 27 of 1991); "amidships" is at the middle of the length (L);

"anniversary date" means the day and the month of each year which will correspond to the date of expiry of the International Oil Pollution Prevention Certificate;

"breadth" (B) means the maximum breadth of the ship, measured amidships to the moulded line of the frame in a ship with a metal shell and to the outer surface of the hull in a ship with a shell of any other material. The breadth (B) shall be measured in metres;

"centre tank" means any tank inboard of a longitudinal bulkhead; "chemical tanker" means a ship constructed or adapted primarily to carry a cargo of noxious liquid substances in bulk;

"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 approved oil discharge monitoring and control system 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; "combination carrier" means a ship designed to carry either oil or solid cargoes in bulk;

"crude oil" means any liquid hydrocarbon mixture occurring naturally in the earth whether or not treated to render it suitable for transportation and includes:

(a) crude oil from which certain distillate fractions may have been removed; and

(b) crude oil to which certain distillate fractions may have been added;

"crude oil tanker" means an oil tanker engaged in the trade of carrying crude oil;

"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;

"en route" means that the ship is under way at sea on a course, or courses, which so far as practicable for navigational purposes, will cause any discharge to be spread over as great an area of the sea as is reasonably practicable;

notwithstanding the provisions for "existing ship" in this paragraph, in Regulations 13, 13A, 13B, 13C, 13D, 18 (1) (e) and 18 (2) (a) of these Regulations, "existing oil tanker" means an oil tanker which is not a new oil tanker;

which is not a new oil tanker;

"existing ship" means a ship which is not a new ship; "forward and after perpendiculars" shall be taken at the forward and after ends of the length (L). The forward perpendicular shall coincide with the foreside of the stem on the waterline on which

the length is measured;

"gas carrier" means a cargo ship constructed or adapted and used for the carriage in bulk of any liquefied gas;

"inspector" means a person being-

(a) a surveyor of ships, or

(b) a person appointed to be an inspector by warrant of the

Minister under section 20 of the Act, or

(c) an officer holding a commissioned naval rank in the Defence Forces, or

(d) a member of the Garda Síochána;

"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;

"IOPP Certificate" means an International Oil Pollution Prevention Certificate;

"International Bulk Chemical Code" means the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in bulk adopted by the Marine Environment Protection Committee of the Organisation by resolution MEPC 19 (22), as amended by resolution MEPC 40 (29) on 16 March, 1990 and as may be amended by the Organisation;

"length" (L) means 96 per cent of the total length on a waterline at 85 per cent of the least moulded depth measured from the top of the keel, or the length from the foreside of the stem to the axis of the rudder stock on that waterline, if that be greater. In ships designed with a rake of keel the waterline on which this length is measured shall be parallel to the designed waterline. The length (L) shall be measured in metres; "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 effects;

(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 the MARPOL Convention not applicable to it as an existing ship;

(b) notwithstanding the provisions of subparagraph (a) of this paragraph, conversion of an existing oil tanker of 20,000 tons deadweight and above to meet the requirements of Regulation 13 of these Regulations shall not be deemed to constitute a major conversion for the purposes of these Regulations;

(c) notwithstanding the provisions of subparagraph (a) of this paragraph, conversion of an existing oil tanker to meet the requirements of Regulation 13F or 13G of these Regulations shall not be deemed to constitute a major conversion for the purpose of these Regulations;

a "Marine Notice" means a Notice described as such, issued by the Minister for the Marine and which may be amended or replaced from time to time;

the "MARPOL Convention" means the International Convention for the Prevention of Pollution from Ships, 1973, as amended by the Protocol thereto, 1978;

"the Minister" means the Minister for the Marine;

"new ship" means a ship:

(a) for which the building contract is placed after 31 December, 1975; or

(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) in the absence of a contract, the construction work of which

is begun after 30 June, 1976; or

(iii) which is completed after 31 December, 1979;

"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 the Convention on the Territorial Sea and the Contiguous Zone, 1958 except that, for the purposes of the present Convention "from the nearest land" off the north-eastern coast of Australia shall mean from a line drawn from a point on the coast of Australia in

latitude $11^{\circ}00'$ S, longitude $142^{\circ}08'$ E to a point in latitude $10^{\circ}35'$ S, longitude $141^{\circ}55'$ E,

thence to a point latitude 10°00' S, longitude 142°00' E,

thence to a point latitude 9°10' S, longitude 143°52' E,

thence to a point latitude 9°00' S, longitude 144°30' E,

thence to a point latitude 13°00' S, longitude 144°00' E,

thence to a point latitude 15°00' S, longitude 146°00' E, thence to a point latitude 18°00' S, longitude 147°00' E, thence to a point latitude 21°00' S, longitude 153°00' E, thence to a point on the coast of Australia in latitude 24°42' S, longitude 153°15' E; notwithstanding the provisions for "new ship" in this paragraph, in Regulations 13, 13B, 13E, 13G and 18 (1) (d) of these Regulations, "new oil tanker" means an oil tanker: (a) for which the building contract is placed after 1 June, 1979; or (b) in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction after 1 January, 1980; or (c) the delivery of which is after 1 June, 1982; or (d) which has undergone a major conversion: (i) for which the contract is placed after 1 June, 1979; or (ii) in the absence of a contract, the construction work of which is begun after 1 January, 1980; or (iii) which is completed after 1 June, 1982; except that, for oil tankers of 70,000 tons deadweight and above, the definition of "new ship" in this Regulation shall apply for the purposes of Regulation 13 (1) of these Regulations; "oil" includes the substances listed in the First Schedule to these **Regulations:** "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 record book" means a book used to record the operations specified in Regulation 20 of these Regulations in the form specified in the Third Schedule to these Regulations; "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" or gas carrier when it is carrying a cargo or part cargo of oil in bulk; the "organisation" means the International Maritime Organisation; a "Party" means a state which has ratified the MARPOL Convention; "permeability" of a space means the ratio of the volume within that space which is assumed to be occupied by water to the total volume of that space; "product carrier" means an oil tanker engaged in the trade of carrying oil other than crude oil; "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 to the carriage of ballast or cargoes other than oil or noxious liquid substances; "slop tank" means a tank specifically designated for the collection of tank drainings, tank washings and other oily mixtures;

"special area" means a sea area where for recognised technical reasons in relation to its oceanographical and ecological condition and to the particular character of its traffic the adoption of special mandatory methods for the prevention of sea pollution by oil is required and shall include those areas listed in Regulation 11 of these Regulations;

"surveyor" means a surveyor of ships or other competent person

appointed under section 20 of the Act for the purposes of section 17 of the Act;

"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;

"volumes" and "areas" in a ship shall be calculated in all cases to moulded lines;

"wing tank" means any tank adjacent to the side shell plating. (2) Any reference in these Regulations to standards and guidelines developed by the Organisation, shall include a reference to any document amending those standards and guidelines which is considered by the Minister to be relevant from time to time and is specified in a Marine Notice.

REG 3

Application

3. (1) Unless expressly provided otherwise, these Regulations apply to all ships

(2) In ships, other than oil tankers, fitted with cargo spaces which are constructed and utilised to carry oil in bulk of an aggregate capacity of 200 cubic metres or more, the requirements of Regulations 10, 11, 14, 15 (1), (2) and (3), 18, 20 and 24 (d) of these Regulations for oil tankers shall also apply to the construction and operation of these spaces, except that where such aggregate capacity is less than 1,000 cubic metres the requirements of Regulation 15 (4) of these Regulations may apply in lieu of Regulation 15 (1), (2) and (3).

REG 4

Equivalents

4. A fitting, material, appliance or apparatus may be fitted in a ship as an alternative to that required by these Regulations if the Minister is satisfied that such fitting, material, appliance or apparatus is at least as effective as that required by these Regulations, but shall not permit the substitution of operational methods to control the discharge of oil as being equivalent to those design and construction features which are prescribed by these Regulations.

REG 5

Surveys

5. (1) Every oil tanker registered in the state of 150 tons gross tonnage and above, and every other ship registered in the State of 400 tons gross tonnage and above shall be subject to the following surveys:

(a) an initial survey before the ship is put into service or before the IOPP Certificate issued under Regulation 6 of these Regulations is issued for the first time, which shall include a complete survey of its structure, equipment, systems, fittings, arrangements and material in so far as the ship is covered by these Regulations. This survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of these Regulations. (b) a renewal survey at intervals not exceeding 5 years, except where Regulation 9 (2), 9 (5), 9 (6) or 9 (7) of these Regulations is applicable. The renewal survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with applicable requirements of these Regulations.

(c) an intermediate survey within 3 months before or after the second anniversary date or within 3 months before or after the third anniversary date of the IOPP Certificate which shall take the place of one of the annual surveys specified in paragraph (1)(d) of this Regulation. The intermediate survey shall be such as to ensure that the equipment and associated pump and piping systems, including oil discharge monitoring and control systems, crude oil washing systems, oily-water separating equipment and oil filtering systems, fully comply with the applicable requirements of these Regulations and are in good working order. Such intermediate surveys shall be endorsed by the surveyor on the IOPP Certificate issued under Regulation 6 or 7 of these Regulations.

(d) an annual survey within 3 months before or after each anniversary date of the IOPP Certificate, including a general inspection of the structure, equipment, systems, fittings, arrangements and material referred to in paragraph (1) (a) of this Regulation to ensure that they have been maintained in accordance with paragraph (2) of this Regulation and that they remain satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed by the surveyor on the IOPP Certificate issued under Regulation 6 or 7 of these Regulations.

(e) an additional survey either general or partial, according to the circumstances, shall be carried out after a repair resulting from investigations prescribed in paragraph (2) of this Regulation, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory and that the ship complies in all respects with the requirements of these Regulations.

(2) (a) The condition of the ship and its equipment shall be maintained to conform with the provisions of these Regulations 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) 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 these Regulations, the master and owner of the ship shall report at the earliest opportunity to the Minister who shall cause investigations to be initiated to determine whether a survey under this Regulation is necessary. If the ship is in a port of another Party the master and owner shall also report immediately to the appropriate authorities of the port State and the Minister shall ascertain that such report has been made.

(3) The Minister shall upon receipt of an application for survey and on payment of such fee (if any) as may be prescribed by the Minister under section 17 of the Act cause the ship to be surveyed by a surveyor.

(4) The surveyor, if satisfied on the initial or renewal survey that he may properly do so, shall forward to the Minister a declaration of survey containing such particulars of the ship as are required by the Minister to enable him to issue an IOPP Certificate in respect of the ship.

REG 6

Issue or endorsement of certificate.

6. (1) On receipt of a declaration of survey carried out in accordance with the provisions of Regulation 5 of these Regulations and on payment of such fee (if any) as may be prescribed, the Minister shall issue an IOPP Certificate 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 ports or offshore terminals under the jurisdiction of other Parties.
(2) The owner of a ship specified in paragraph (1) of this Regulation shall ensure that the ship does not proceed to sea unless the IOPP Certificate is in force in relation to it.

REG 7

Issue or endorsement of certificate by another Government. 7. (1) The Minister may request the Government of another Party to survey a ship registered in the State and, if they are satisfied that the provisions of these Regulations are complied with, they shall issue or authorise the issue of an IOPP Certificate to the ship, and where appropriate, endorse or authorise the endorsement of that IOPP Certificate on the ship, in accordance with these Regulations.

(2) A copy of the IOPP Certificate and a copy of the survey report shall be transmitted as soon as possible to the Minister.(3) An IOPP Certificate issued in accordance with paragraph (1) of this Regulation shall contain a statement to the effect that it has been issued at the request of the Minister and it shall have the same force and receive the same recognition as an IOPP Certificate issued under Regulation 6 of these Regulations.

(4) The Minister may at the request of the Government of another Party, cause a ship registered in that State and entitled to fly the flag of that State to be surveyed as if it were a ship registered in the State, and, if satisfied that the provisions of these Regulations are complied with, shall cause an IOPP Certificate to be issued to the ship and, where appropriate, endorse or authorise the endorsement of that Certificate on the ship in accordance with these Regulations.

(5) An IOPP Certificate issued in accordance with paragraph (4) of this Regulation shall contain a statement to the effect that it has been issued at the request of the Government in question.(6) No IOPP Certificate shall be issued to a ship which is entitled to fly the flag of a state which is not a Party.

REG 8

Form of certificate.

8. The IOPP Certificate shall be in the form set out in the Second Schedule to these Regulations or in a form to the like effect.

REG 9

Duration and validity of certificate.

9. (1) An IOPP Certificate shall remain in force for such period not exceeding 5 years as the Minister may determine and specify in the Certificate.

(2) (a) Notwithstanding the requirements of paragraph (1) of this Regulation, when the renewal survey is completed within 3 months before the expiry date of the existing IOPP Certificate, the new IOPP Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding 5 years from the date of expiry of the existing IOPP Certificate.

(b) When the renewal survey is completed after the expiry date of the existing IOPP Certificate, the new IOPP Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding 5 years from the date of expiry of the existing IOPP Certificate.

(c) When the renewal survey is completed more than 3 months before the expiry date of the existing IOPP Certificate, the new IOPP Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding 5 years from the date of completion of the renewal survey.

(3) If an IOPP Certificate is issued for a period of less than 5 years, the Minister may extend the validity of the Certificate beyond the expiry date to the maximum period specified in paragraph (1) of this Regulation, provided that the surveys referred to in Regulation 5 (1) (c) and 5 (1) (d) of these Regulations are carried out as appropriate.

(4) If a renewal survey has been completed and a new IOPP Certificate cannot be issued or placed on board the ship before the expiry date of the existing IOPP Certificate, the surveyor may endorse that Certificate and such a Certificate shall be accepted as valid for a further period which shall not exceed 5 months from the expiry date.

(5) If a ship at the time when an IOPP Certificate expires is not in a port in which it is to be surveyed, the Minister may extend the period of validity of the Certificate but this extension shall be granted only for the purpose of allowing the ship to complete its voyage to the port in which it is to be surveyed, and then only in cases where it appears proper and reasonable to do so. An IOPP Certificate shall not be extended for a period longer than 3 months, and a ship to which an extension is granted shall not, on its arrival in the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port without having a new IOPP Certificate. When the renewal survey is completed, the new IOPP Certificate shall be valid to a date not exceeding 5 years from the date of expiry of the existing IOPP Certificate before the extension was granted.

(6) An IOPP Certificate issued to a ship engaged on short voyages which has not been extended under the foregoing provisions of this Regulation may be extended by the Minister for a period of up to one month from the date of expiry stated on it. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding 5 years from the date of expiry of the existing Certificate before the extension was granted.

(7) In such special circumstances as the Minister may determine a new IOPP Certificate need not be dated from the date of expiry of the existing IOPP Certificate as required by paragraph (2) (b), (5) or (6) of this Regulation. In these special circumstances, the new IOPP Certificate shall be valid to a date not exceeding 5 years from the date of completion of the renewal survey.

(8) If an annual or intermediate survey is completed before the period specified in Regulation 5 of these Regulations, then:(a) the anniversary date shown on the IOPP Certificate shall be amended by endorsement to a date which shall not be more than 3 months later than the date on which the survey was completed;(b) the subsequent annual or intermediate survey required by Regulation 5 of these Regulations shall be completed at the intervals prescribed by that Regulation using the new anniversary date;

(c) the expiry date may remain unchanged provided one or more annual or intermediate surveys, as appropriate, are carried out so that the maximum intervals between the surveys prescribed by Regulation 5 of these Regulations are not exceeded. (9) An IOPP Certificate issued under Regulation 6 or 7 of these Regulations shall cease to be valid in any of the following cases: (a) if the relevant surveys are not completed within the periods specified under Regulation 5 (1) of these Regulations; (b) if the Certificate is not endorsed in accordance with Regulation 5(1)(c) or 5(1)(d) of these Regulations; (c) if the ship transfers to the flag of another state. In the case of a transfer to the flag of another Party, if requested within 3 months after the transfer has taken place, the Minister shall, as soon as possible, transmit to the Government of the other Party copies of the IOPP Certificate carried by the ship before the transfer and, if available, copies of the relevant survey reports.

PART II.

Requirements for control of operational pollution.

REG 10

Control of discharge of oil.

10. (1) Subject to the provisions of section 11 of the Act, Regulation 11 of these Regulations and paragraph (2) of this Regulation, any discharge into the sea of oil or oily mixtures from ships to which these Regulations apply is hereby prohibited unless the discharge complies with the following conditions:

(a) for an oil tanker, except as provided for in subparagraph (b) of this paragraph:

(b) of this paragraph:

(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 30 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 1/30,000 of the total quantity of the particular cargo of which the residue formed a part; and

(vi) the tanker has in operation an oil discharge monitoring and control system and a slop tank arrangement as required by Regulation 15 of these Regulations.

(b) from a ship of 400 gross tons 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 proceeding en route;

(iii) the oil content of the effluent without dilution does not exceed 15 parts per million; and

(iv) the ship has in operation equipment as required by Regulation 16 of these Regulations.

(2) The owner of a ship of less than 400 tons gross tonnage other than an oil tanker whilst outside the special area, shall ensure that it is equipped as far as practicable and reasonable with installations to ensure the storage of oil or oily mixtures on board and their discharge to reception facilities or into the sea in compliance with the requirements of paragraph (1) (b) of this Regulation.

(3) The provisions of paragraph (1) of this Regulation shall not apply to the discharge of clean or segregated ballast or to the discharge of unprocessed oily mixtures which without dilution have an oil content not exceeding 15 parts per million and which do not originate from cargo pump-room bilges and are not mixed with oil cargo residues.

(4) A discharge into the sea shall not 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 Regulation.

(5) The residues of oil or oily mixture which cannot be discharged into the sea in compliance with paragraphs (1), (2) and (3) of this Regulation shall be retained on board or discharged to reception facilities.

(6) In the case of a ship, referred to in Regulation 16 (4) of these Regulations, not fitted with equipment as required by Regulation 16 (1) (a) or 16 (1) (b) of these Regulations, the provisions of paragraph 1 (b) of this Regulation will not apply until 6 July, 1998 or the date on which the ship is fitted with such equipment, whichever is the earlier. Until this date any discharge from machinery space bilges into the sea of oil or oily mixtures from such a ship is hereby prohibited unless the discharge complies with the following conditions:

(a) the oily mixture does not originate from the cargo pump-room bilges;

(b) the oily mixture is not mixed with oil cargo residues;

(c) the ship is not within a special area;

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

(e) the ship is proceeding en route;

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

(g) the ship has in operation oily-water separating equipment of a design approved by the Minister, taking into account the specification recommended by the Organisation.

REG 11

Methods for the prevention of oil pollution from ships while operating in special areas.

11. (1) For the purposes of these Regulations the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the "Gulfs area", the Gulf of Aden and the Antarctic area, which are defined as follows:

(a) the Mediterranean Sea area means the Mediterranean Sea proper including the gulfs and seas therein with the boundary between the Mediterranean and the Black Sea constituted by the $41^{\circ}N$ parallel and bounded to the west by the Straits of Gibraltar at the meridian of $5^{\circ}36'$ W.

(b) The Baltic Sea area means the Baltic Sea proper with the Gulf of Bothnia, the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at $57^{\circ}44.8$ 'N.

(c) the Black Sea area means the Black Sea proper with the boundary between the Mediterranean and the Black Sea constituted by the parallel 41° N.

(d) the Red Sea area means the Red Sea proper including the Gulfs of Suez and Aqaba bounded at the south by the rhumb line between Ras si Ane $(12^{\circ}28.5' \text{ N}, 43^{\circ}19.6' \text{ E})$ and Husn Murad $(12^{\circ}40.4' \text{ N}, 43^{\circ}30.2' \text{ E}).$

(e) the Gulfs area means the sea area located north-west of the rhumb line between Ras al Hadd ($22^{\circ}30'$ N, $59^{\circ}48'$ E) and Ras Al Fasteh ($25^{\circ}04'$ N, $61^{\circ}25'$ E).

(f) the Gulf of Aden area means that part of the Gulf of Aden between the Red Sea and the Arabian Sea bounded to the west by the rhumb line between Ras si Ane ($12^{\circ}28.5'$ N, $43^{\circ}19.6'$ E) and Husn Murad ($12^{\circ}40.4'$ N, $43^{\circ}30.2'$ E) and to the east by the rhumb line between Ras Asir ($11^{\circ}50'$ N, $51^{\circ}16.9'$ E) and Ras Fartak ($15^{\circ}35'$ N, $52^{\circ}13.8'$ E).

(g) the Antarctic area means the sea area south of latitude 60° S.

(2) Subject to the provisions of section 11 of the Act:

(a) any discharge into the sea of oil or oily mixture from any oil tanker registered in the State, or any ship of 400 tons gross tonnage and above other than an oil tanker, registered in the State, is hereby prohibited while in a special area. In respect of the Antarctic area, any discharge into the sea of oil or oily mixture from any ship registered in the State is hereby prohibited. (b) except as provided for in respect of the Antartic area under subparagraph 2 (a) of this Regulation, any discharge into the sea of oil or oily mixture from a ship of less than 400 tons

gross tonnage, other than an oil tanker, is hereby prohibited while in a special area, except when the oil content of the effluent without dilution does not exceed 15 parts per million.

(3) (a) the provisions of this Regulation shall not apply to the discharge of clean or segregated ballast.

(b) the provisions of subparagraph (2) (a) of this Regulation shall not apply to the discharge of processed bilge water from machinery spaces, provided that all of the following conditions are satisfied:

(i) the bilge water does not originate from cargo pump-room bilges;

(ii) the bilge water is not mixed with oil cargo residues;

(iii) the ship is proceeding en route;

(iv) the oil content of the effluent without dilution does not exceed 15 parts per million;

(v) the ship has in operation oil filtering equipment complying with Regulation 16 (3) (c) of these Regulations; and

(vi) the filtering system is equipped with a stopping device which will ensure that the discharge is automatically stopped when the oil content of the effluent exceeds 15 parts per million.

(4) (a) A discharge into the sea shall not 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 Regulation.

(b) The oil residues which cannot be discharged into the sea in compliance with paragraph (2) or (3) of this Regulation shall be retained on board or discharged to reception facilities.

(5) Nothing in this Regulation shall prohibit a ship on a voyage only part of which is in a special area from discharging outside the special area in accordance with Regulation 10 of these Regulations.

REG 12

Reception facilities.

12. (1) A harbour authority or person having control of a harbour shall provide at oil loading terminals, repair ports, and in other ports in which ships have oily residues to discharge, facilities for the reception of such residues and oily mixtures as remain from oil tankers and other ships adequate to meet the needs of the ships using them without causing undue delay to ships.

(2) Reception facilities in accordance with paragraph (1) of this Regulation shall be provided in:

(a) all ports and terminals in which crude oil is loaded into oil tankers where such tankers have immediately prior to arrival completed a ballast voyage of not more than 72 hours or not more than 1,200 nautical miles;

(b) all ports and terminals in which oil other than crude oil in bulk is loaded at an average quantity of more than 1,000 metric tons per day;

(c) all ports having ship repair yards or tank cleaning facilities;

(d) all ports and terminals which handle ships provided with sludge tanks required by Regulation 17 of these Regulations;
(e) all ports in respect of oily bilge waters and other residues, which cannot be discharged in accordance with Regulation 10 of these Regulations; and

(f) all loading ports for bulk cargoes in respect of oil residues from combination carriers which cannot be discharged in accordance with Regulation 10 of these Regulations.

(3) The capacity for the reception facilities shall be as follows:

(a) crude oil loading terminals shall have sufficient reception facilities to receive oil and oily mixtures which cannot be discharged in accordance with the provisions of Regulation 10 (1)
(a) of these Regulations from all oil tankers on voyages as described in paragraph (2) (a) of this Regulation;

(b) loading ports and terminals referred to in paragraph (2) (b) of this Regulation, so this Regulation shall have sufficient reception facilities to receive oil and oily mixtures which cannot be discharged in accordance with the provisions of Regulation 10 (1) (a) of these Regulations from oil tankers which load oil other than crude oil in bulk;

(c) all ports having ship repair yards or tank cleaning facilities shall have sufficient reception facilities to receive all residues and oily mixtures which remain on board for disposal from ships prior to entering such yards or facilities;

(d) all facilities provided in ports and terminals under paragraph (2) (d) of this Regulation shall be sufficient to receive all residues retained according to Regulation 17 of these Regulations from all ships that may reasonably be expected to call at such ports and terminals;

(e) all facilities provided in ports and terminals under this Regulation shall be sufficient to receive oily bilge waters and other residues which cannot be discharged in accordance with Regulation 10 of these Regulations;

(f) the facilities provided in loading ports for bulk cargoes shall take into account the special problems of combination carriers as appropriate.

REG 13

Segregated ballast tanks, dedicated clean ballast tanks and crude oil washing.

13. Subject to the provisions of Regulations 13C and 13D of these Regulations, the owner and master of an oil tanker shall ensure that the oil tanker complies with the requirements of this Regulation.

New oil tankers of 20,000 tons deadweight and above

(1) Every new crude oil tanker of 20,000 tons deadweight and above and every new product carrier of 30,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with paragraphs (2), (3) and (4), or paragraph (5) as appropriate, of this Regulation.

(2) The capacity of the segregated ballast tanks shall be so

determined that the ship may operate safely on ballast voyages without recourse to the use of cargo tanks for water ballast except as provided for in paragraph (3) or (4) of this Regulation. In all cases, however, the capacity of segregated ballast tanks shall be at least such that, in any ballast condition at any part of the voyage, including the conditions consisting of lightweight plus segregated ballast only, the ship's draughts and trim can meet each of the following requirements:

(a) the moulded draught amidships (dm) in metres (without taking into account any ship's deformation) shall not be less than: dm = 2.0 + 0.02L;

(b) the draughts at the forward and after perpendiculars shall correspond to those determined by the draught amidships (dm) as specified in subparagraph (a) of this paragraph, in association with the trim by the stern of not greater than 0.015L; and

(c) in any case the draught at the after perpendicular shall not be less than that which is necessary to obtain full immersion of the propeller(s).

(3) Ballast water shall not be carried in cargo tanks, except:

(a) on those rare voyages when weather conditions are so severe that, in the opinion of the master, it is necessary to carry additional ballast water in cargo tanks for the safety of the ship;

(b) in exceptional cases where the particular character of the operation of an oil tanker renders it necessary to carry ballast water in excess of the quantity required under paragraph (2) of this Regulation, provided that such operation of the oil tanker falls under the category of exceptional cases as established by the Organisation.

Such additional ballast water shall be processed and discharged in compliance with Regulation 10 of these Regulations and in accordance with the requirements of Regulation 15 of these Regulations and an entry shall be made in the Oil Record Book referred to in Regulation 20 of these Regulations.

(4) In the case of new crude oil tankers, the additional ballast permitted in paragraph (3) of this Regulation shall be carried in cargo tanks only if such tanks have been crude oil washed in accordance with Regulation 13B of these Regulations before departure from an oil unloading port or terminal.

(5) Notwithstanding the provisions of paragraph (2) of this Regulation, the segregated ballast conditions for oil tankers less than 150 metres in length shall be to the satisfaction of the Minister.

(6) Every new crude oil tanker of 20,000 tons deadweight and above shall be fitted with a cargo tank cleaning system using crude oil washing. This system shall fully comply with the requirements of Regulation 13B of these Regulations within one year after the tanker was first engaged in the trade of carrying crude oil or by the end of the third voyage carrying crude oil suitable for crude oil washing, whichever occurs later. Unless such oil tanker carries crude oil which is not suitable for crude oil washing, the oil tanker shall operate the system in accordance with the requirements of Regulation 13B of these Regulations.

Existing crude oil tankers of 40,000 tons deadweight and above (7) Subject to the provisions of paragraphs (8) and (9) of this Regulation, every existing crude oil tanker of 40,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with the requirements of paragraphs (2) and (3) of this Regulation.

(8) Existing crude oil tankers referred to in paragraph (7) of this Regulation may, in lieu of being provided with segregated ballast tanks, operate with a cargo tank cleaning procedure using crude oil washing in accordance with Regulation 13B of these Regulations unless the crude oil tanker is intended to carry crude oil which is not suitable for crude oil washing.

Existing product carriers of 40,000 tons deadweight and above (9) Every existing product carrier of 40,000 tons deadweight and above shall be provided with segregated ballast tanks and shall comply with the requirements of paragraphs (2) and (3) of this Regulation, or, alternatively, operate with dedicated clean ballast tanks in accordance with the provisions of Regulation 13A of these Regulations.

An oil tanker qualified as a segregated ballast oil tanker (10) Any oil tanker which is not required to be provided with segregated ballast tanks in accordance with paragraphs (1), (7) or (9) of this Regulation may, however, be qualified as a segregated ballast tanker, provided that it complies with the requirements of paragraphs (2) and (3), or paragraph (5) as appropriate, of this Regulation.

REG 13A

Requirements for oil tankers with dedicated clean ballast tanks. 13A. (1) The owner of an oil tanker operating with dedicated clean ballast tanks in accordance with the provisions of Regulation 13 (9) of these Regulations shall ensure that the oil tanker has adequate tank capacity, dedicated solely to the carriage of clean ballast to meet the requirements of Regulation 13 (2) and (3) of these Regulations.

(2) The arrangements and operational procedures for dedicated clean ballast tanks shall comply with the requirements issued by the Minister and specified in a Marine Notice.

(3) An oil tanker operating with dedicated clean ballast tanks shall be equipped with an oil content meter, approved by the Minister so as to permit supervision of the oil content in ballast water being discharged.

(4) Every oil tanker operating with dedicated clean ballast tanks shall be provided by the owner with a Dedicated Clean Ballast Tank Operation Manual detailing the system and specifying operational procedures, being a manual approved by the Minister and containing all the information set out in appropriate specifications issued by the Minister and specified in a Marine Notice. If an alteration affecting the dedicated clean ballast tanks system is made, the Operation Manual shall be revised and the revision submitted to the Minister for approval.

REG 13B

Requirements for crude oil washing.

13B. (1) The owner of an oil tanker shall ensure that every crude oil washing system required to be provided in accordance with

Regulation 13 (6) and (8) of these Regulations complies with the requirements of this Regulation.

(2) The crude oil washing installation and associated equipment and arrangements shall comply with the Specifications for the Design, Operation and Control of Crude Oil Washing Systems adopted by the International Conference on Tanker Safety and Pollution Prevention, 1978, in resolution 15 and as may be revised by the Organisation.
(3) With respect to the ballasting of cargo tanks, sufficient cargo tanks shall be crude oil washed prior to each ballast voyage in order that, taking into account the tanker's trading pattern and expected weather conditions, ballast water is put only into cargo tanks which have been crude oil washed.

(4) Every oil tanker operating with crude oil washing systems shall be provided by the owner with an Operations and Equipment Manual detailing the system and equipment and specifying operational procedures to be followed, being a manual approved by the Minister and containing all the information set out in requirements issued by the Minister and specified in a Marine Notice. If an alteration is made affecting the crude oil washing system, the Operations and Equipment Manual shall be revised and the revision submitted to the Minister for approval.

REG 13C

Existing tankers engaged in specific trades.

13C. (1) Subject to the provisions of paragraph (2) of this Regulation, Regulation 13 (7), 13 (8) and 13 (9) of these Regulations shall not apply to an existing oil tanker solely engaged in specific trades between:

(a) ports or terminals within the State or a Party; or

(b) ports or terminals of Parties, where:

(i) the voyage is entirely within a special area as defined in

Regulation 11 (1) of these Regulations; or

(ii) the voyage is entirely within other limits designated by the Organisation.

(2) The provisions of paragraph (1) of this Regulation shall apply only when the ports or terminals where cargo is loaded on such voyages are provided with reception facilities adequate for the reception and treatment of all the ballast and tank washing water from oil tankers using them and all the following conditions are complied with:

(a) subject to section 11 of the Act, all ballast water, including clean ballast water, and tank washing residues are retained on board and transferred to the reception facilities and the appropriate entry in the Oil Record Book referred to in Regulation 20 of these Regulations is endorsed by the competent port State authority;

(b) agreement has been reached between the Government and the Governments of the port States referred to in subparagraph (1) (a) or (b) of this Regulation concerning the use of an existing oil tanker for a specific trade;

(c) the adequacy of the reception facilities (in accordance with any Regulations relating to reception facilities) at the ports or terminals referred to in paragraph (1) of this Regulation, shall have been approved by the Government and the Governments of the Parties within which such ports or terminals are situated; and (d) the IOPP Certificate is endorsed to the effect that the oil tanker is solely engaged in such specific trade.

REG 13D

Existing oil tankers having special ballast arrangements. 13D. (1) Where an existing oil tanker is so constructed or operates in such a manner that it complies at all times with the draught and trim requirements set out in Regulation 13 (2) of these Regulations without recourse to the use of ballast water, it shall be deemed to comply with the segregated ballast tank requirements referred to in Regulation 13 (7) of these Regulations provided that the following conditions are complied with:

(a) operational procedures and ballast arrangements have been approved by the Minister;

(b) agreement is reached between the Government and the Governments of the port Parties concerned when the draught and trim requirements are achieved through an operational procedure; and
(c) the IOPP Certificate is endorsed to the effect that the oil tanker is operating with special ballast arrangements.
(2) The master of an existing oil tanker shall ensure that ballast water is not carried in oil tanks except on those rare voyages when weather conditions are so severe that, in the opinion of the master, it is necessary to carry additional ballast water in cargo tanks for the safety of the ship. Such additional ballast water shall be processed and discharged in compliance with Regulation 10 of these Regulations and in accordance with the requirements of Regulation 15 of these Regulations and entry shall be made in the Oil Record Book referred to in Regulation 20 of these Regulations.

REG 13E

Protective location of segregated ballast spaces.

13E. (1) The owner shall ensure that in every new crude oil tanker of 20,000 tons deadweight and above and every new product carrier of 30,000 tons deadweight and above, the segregated ballast tanks required to provide the capacity to comply with the requirements of Regulation 13 of these Regulations which are located within the cargo tank length, are arranged in accordance with the requirements of paragraphs (2), (3) and (4) of this Regulation to provide a measure of protection against oil outflow in the event of grounding or collision.

(2) Segregated ballast tanks and spaces other than oil tanks within the cargo tank length (Lt) shall be so arranged as to comply with the following requirement: C P + C + C P + C P + 2 P =

S P AC + S P AS J [LT (B + 2D)]

where PAC=the side shell area in square metres for each segregated ballast tank or space other than an oil tank based on projected moulded dimensions,PAs=the bottom shell area in square metres for each such tank or space based on projected moulded dimensions,Lt=length in metres between the forward and after extremities of the cargo tanks,B=maximum breadth of the ship in metres as defined in Regulation 2 (1) of these Regulations,D=moulded depth in metres measured vertically from the top of the keel to the top of the freeboard deck beam at side amidships. In ships having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwale were of angular design,J=0.45 for oil tankers of 20,000 tons deadweight, 0.30 for oil tankers of 200,000 tons deadweight and above, subject to the provisions of paragraph (3) of this Regulation.For intermediate values of deadweight the value of "J" shall be determined by linear interpolation.

For the purposes of this Regulation, the symbols in this paragraph shall have the meaning assigned to them in this paragraph. (3) For tankers of 200,000 tons deadweight and above the value of

"J" may be reduced as follows:

J reduced = or 0.2, whichever is greater

where:a = 0.25 for oil tankers of 200,000 tons deadweight,a = 0.40 for oil tankers of 300,000 tons deadweight,a = 0.50 for oil tankers of 420,000 tons deadweight and above.For intermediate values of deadweight the value of "a" shall be determined by linear interpolation.OC = as defined in Regulation 23 (1) (a) of these Regulations,OS = as defined in Regulation 23 (1) (b) of these Regulations,OA = the allowable oil outflow as required by Regulation 24 (b) of these Regulations.

(4) In the determination of "PAC" and "PAS" for segregated ballast tanks and spaces other than oil tanks the following shall apply:
(a) the minimum width of each wing tank or space either of which extends for the full depth of the ship's side or from the deck to the top of the double bottom shall be not less than 2 metres. The width shall be measured inboard from the ship's side at right angles to the centre line. Where a lesser width is provided the wing tank or space shall not be taken into account when calculating the protecting area "PAC"; and
(b) the minimum vertical depth of each double bottom tank or space shall be B/15 or 2 metres, whichever is the lesser. Where a lesser depth is provided the bottom tank or space shall not be taken into account when calculating the protecting area "PAC"; and

The minimum width and depth of wing tanks and double bottom tanks shall be measured clear of the bilge area and, in the case of minimum width, shall be measured clear of any rounded gunwale area.

REG 13F

Prevention of oil pollution in the event of collision or stranding.

13F. (1) This Regulation shall apply to oil tankers of 600 tons deadweight and above:

(a) for which the building contract is placed on or after 6 July, 1993, or

(b) in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 6 January, 1994, or

(c) the delivery of which is on or after 6 July, 1996; or

(d) which have undergone a major conversion:

(i) for which the contract is placed after 6 July, 1993; or

(ii) in the absence of a contract, the construction work of which is begun after 6 January, 1994; or

(iii) which is completed after 6 July, 1996.

(2) The owner of an oil tanker of 5,000 tons deadweight and above shall ensure that:

(a) in lieu of Regulation 13E, as applicable, the oil tanker complies with the requirements of paragraph (3) of this Regulation unless it is subject to the provisions of paragraphs (4) and (5) of this Regulation; and

(b) the oil tanker complies, if applicable, with the requirements of paragraph (6) of this Regulation.

(3) The entire cargo tank length shall be protected by ballast tanks or spaces other than cargo and fuel oil tanks as follows:(a) wing tanks or spaces,

wing tanks or spaces shall extend either for the full depth of the ship's side or from the top of the double bottom to the uppermost deck, disregarding a rounded gunwale where fitted. They shall be arranged such that the cargo tanks are located inboard of the moulded line of the side shell plating, nowhere less than the distance w which, as shown in figure 1 (page 37), is measured at any cross-section at right angles to the side shell, as specified below:

w = 2.0m, whichever is the lesser.

The minimum value of w = 1.0m.

(b) double bottom tanks or spaces

at any cross-section the depth of each double bottom tank or space shall be such that the distance h between the bottom of the cargo tanks and the moulded line of the bottom shell plating measured at right angles to the bottom shell plating as shown in figure 1 (page 37) is not less than specified below:

h = B/15(m) or,

h = 2.0m, whichever is the lesser.

The minimum value of h = 1.0m.

(c) turn of the bilge area or at locations without a clearly defined turn of the bilge

when the distances h and w are different, the distance w shall have preference at levels exceeding 1.5h above the baseline as shown in figure 1 (page 37).

(d) the aggregate capacity of ballast tanks

on crude oil tankers of 20,000 tons deadweight and above and product carriers of 30,000 tons deadweight and above, the aggregate capacity of wing tanks, double bottom tanks, forepeak tanks and afterpeak tanks shall not be less than the capacity of segregated ballast tanks necessary to meet the requirements of Regulation 13 of these Regulations. Wing tanks or spaces and double bottom tanks used to meet the requirements of Regulation 13 shall be located as uniformly as practicable along the cargo tank length. Additional segregated ballast capacity provided for reducing longitudinal hull girder bending stress, trim, etc., may be located anywhere within the ship.

(e) suction wells in cargo tanks

suction wells in cargo tanks may protrude into the double bottom below the boundary line defined by the distance h provided that such wells are as small as practicable and the distance between the well bottom and bottom shell plating is not less than 0.5h. (f) ballast and cargo piping

ballast piping and other piping such as sounding and vent piping to ballast tanks shall not pass through cargo tanks. Cargo piping and similar piping to cargo tanks shall not pass through ballast tanks. Exemptions to this requirement may be granted for short lengths of piping, provided that they are completely welded or equivalent. (4) (a) Double bottom tanks or spaces as required by paragraph (3) (b) of this Regulation may be dispensed with, provided that the design of the tanker is such that the cargo and vapour pressure exerted on the bottom shell plating forming a single boundary between the cargo and the sea does not exceed the external hydrostatic water pressure, as expressed by the following formula: f x hC x pC x g + 100 D p [V1] dn x ps x g where:

hC =height of cargo in contact with the bottom shell plating in metres,pC = maximum cargo density in t/m^3 ,dn = minimum operating draught under any expected loading condition in meters,pS = density of seawater in t/m^3 ,Dp = maximum set pressure of pressure/vacuum valve provided for the cargo tank in bars,f = safety factor = 1.1,g = standard acceleration of gravity (9.81 m/s2);

(b) any horizontal partition necessary to fulfil the requirements of subparagraph (a) of this paragraph shall be located at a height of not less than B/6 or 6 m, whichever is the lesser, but not more than 0.6D, above the baseline where D is the moulded depth amidships;

(c) the location of wing tanks or spaces shall be as defined in paragraph (3) (a) of this Regulation, except that, below a level 1.5 h above the baseline where h is as defined in paragraph (3)
(b) of this Regulation, the cargo tank boundary line may be vertical down to the bottom plating, as shown in figure 2 (page 37).

(5) Other methods of design and construction of oil tankers may also be accepted as alternatives to the requirements prescribed in paragraph (3) of this Regulation, provided that such methods ensure at least the same level of protection against oil pollution in the event of collision or stranding and are approved in principle by the Minister based on guidelines developed by the Organisation.
(6) For oil tankers of 20,000 tons deadweight and above the damage assumptions prescribed in Regulation 25 (2) (b) shall be supplemented by the following assumed bottom raking damage:

(a) longitudinal extent:

(i) ships of 75,000 tons deadweight and above: 0.6L measured from the forward perpendicular;

(ii) ships of less than 75,000 tons deadweight: 0.4L measured from the forward perpendicular;

(b) transverse extent: B/3 anywhere in the bottom;

(c) vertical extent: breach of the outer hull.

(7) Oil tankers of less than 5,000 tons deadweight shall:

(a) at least be fitted with double bottom tanks or spaces

having such a depth that the distance h specified in paragraph (3)

(b) of this Regulation complies with the following:

h = B/15 (m),

with a minimum value of h = 0.76m;

in the turn of the bilge area and at locations without a clearly defined turn of the bilge, the cargo tank boundary line shall run parallel to the line of the midship flat bottom as shown in figure 3 (page 38); and

(b) be provided with cargo tanks so arranged that the capacity of each cargo tank does not exceed 700 m3 unless wing tanks or spaces are arranged in accordance with paragraph (3) (a) of this Regulation complying with the following:

with a minimum value of w = 0.76 m.

(8) Oil shall not be carried in any space extending forward of a collision bulkhead located in accordance with Regulation II-1/11 of the International Convention for the Safety of Life at Sea, 1974, as amended. An oil tanker that is not required to have a collision bulkhead in accordance with that Regulation shall not carry oil in any space extending forward of the transverse plane perpendicular to the centreline that is located as if it were a collision bulkhead located in accordance with that Regulation.

(9) In approving the design and construction of oil tankers to be built in accordance with the provisions of this Regulation, the Minister shall have due regard to the general safety aspects including the need for the maintenance and inspections of wing and double bottom tanks or spaces.

REG 13G

Measures for existing tankers for the prevention of oil pollution in the event of collision or stranding 13G. Measures for existing tankers,

(1) This Regulation shall.

(a) apply to crude oil tankers of 20,000 tons deadweight and above and to product carriers of 30,000 tons deadweight and above, which are contracted, the keels of which are laid, or which are delivered before the dates specified in Regulation 13F (1) of these Regulations; and

(b) not apply to oil tankers complying with Regulation 13F of these Regulations, which are contracted, the keels of which are laid, or are delivered before the dates specified in Regulation 13F (1) of these Regulations; and

(c) not apply to oil tankers covered by subparagraph (a) above which comply with Regulation 13F (3) (a) and (b) or 13F (4) or 13F (5) of these Regulations, except that the requirement for minimum distances between the cargo tank boundaries and the ship side and bottom plating need not be met in all respects. In that event, the side protection distances shall not be less than those specified in the International Bulk Chemical Code for type 2 cargo tank location and the bottom protection shall comply with Regulation 13E (4) (b) of these Regulations.

(2) The requirements of this Regulation shall take effect as from 6 July, 1995.

(3) The owner of an oil tanker to which this Regulation applies shall ensure that—

(a) the tanker is subject to an enhanced programme of

inspections during periodical, intermediate and annual surveys, the scope and frequency of which shall at least comply with the guidelines developed by the Organisation;

(b) in case the tanker is more than five years old, it has on board, available to the competent authority of any Government of a Party, a complete file of the survey reports, including the results of all scantling measurement required, as well as the statement of structural work carried out, and

(c) the aforesaid file is accompanied by a condition evaluation report, containing conclusions on the structural condition of the ship and its residual scantlings, endorsed to indicate that it has been accepted by or on behalf of the flag Administration. This file and condition evaluation report shall be prepared in a format approved by the Minister as contained in the guidelines developed by the Organisation.

(4) The owner of an oil tanker shall ensure that—

(a) if the tanker does not meet the requirements of a new oil tanker as defined in Regulation 2 (1) of these Regulations it complies with the requirements of Regulation 13F of these Regulations not later than 25 years after its date of delivery, unless wing tanks or double bottom spaces, not used for the carriage of oil and meeting the width and height requirements of Regulation 13E (4) of these Regulations, cover at least 30 per cent. of Lt for the full depth of the ship on each side or at least 30 per cent. of the projected bottom shell area SPAS within the length Lt, where Lt and the projected bottom shell area SPAs are as defined in Regulation 13E (2) of these Regulations, in which case compliance with Regulation 13F of these Regulations is required not later than 30 years after its date of delivery,

(b) if the tanker meets the requirements of a new oil tanker as defined in regulation 2 (1) of these Regulations it complies with the requirements of Regulation 13F of these Regulations not later than 30 years after its date of delivery,

(c) any new ballast and load conditions resulting from the application of this paragraph shall be subject to approval of the Minister which shall have regard, in particular, to longitudinal and local strength, intact stability and, if applicable, damage stability.
(5) Other structural or operational arrangements such as hydrostatically balanced loading may be accepted as alternatives to the requirements prescribed in paragraph (4) of this Regulation, provided that such alternatives ensure at least the same level of protection against oil pollution in the event of collision or stranding and are approved by the Minister based on guidelines developed by the Organisation.

REG 14

Segregation of oil and water ballast and carriage of oil in forepeak tanks

14. The owner and master of a ship or oil tanker, as the case may be, shall ensure that—

(a) except as provided in paragraph (b) of this Regulation, in the case of new ships of 4,000 tons gross tonnage and above other than oil tankers, and in the case of new oil tankers of 150 tons gross tonnage and above, ballast water is not carried in any oil

fuel tank;

(b) where abnormal conditions or the need to carry large quantities of oil fuel render it necessary to carry ballast water which is not a clean ballast in any oil fuel tank, such ballast water is discharged to reception facilities or into the sea in compliance with Regulation 10 using the equipment specified in Regulation 16 (1) (b) of these Regulations and an entry shall be made in the Oil Record Book to this effect;

(c) in the case of any other ship, that it complies with the requirements of paragraph (a) of this Regulation as far as is reasonable and practicable to do so;

(d) in the case of a ship of 400 tons gross tonnage and above, for which the building contract is placed after 1 January, 1982 or, in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction after 1 July, 1982, oil is not carried in a forepeak tank or a tank forward of the collision bulkhead; and

(e) in the case of a ship other than a ship to which paragraph (d) of this Regulation applies, that the ship complies with the provisions of that paragraph, as far as is reasonable and practicable to do so.

REG 15

Retention of oil on board.

15. (1) Subject to the provisions of paragraphs (5) and (6) of this Regulation, the owner and master of an oil tanker of 150 tons gross tonnage and above shall ensure that the oil tanker is provided with arrangements in accordance with the requirements of paragraphs (2) and (3) of this Regulation, provided that in the case of existing tankers the requirements for oil discharge monitoring and control systems and slop tank arrangements shall not apply until one year after the date of commencement of these Regulations.

(2) (a) Adequate means shall be provided for cleaning the cargo tanks and transferring the dirty ballast residue and tank washings from the cargo tanks into a slop tank of a type 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 of slop tanks in such a way that any effluent discharge into the sea will be such as to comply with the provisions of Regulation 10 of these Regulations;

(c) the arrangements of the slop tank or combination of slop tanks shall have a capacity necessary to retain the slop generated by tank washings, oil residues and dirty ballast residues. The total capacity of the slop tank or tanks shall not be less than 3 per cent of the oil carrying capacity of the ships, except that the Minister may accept:

(i) 2 per cent for such oil tankers where the tank washing arrangements are such that once the slop tank or tanks are charged with washing water, this water is sufficient for tank washing and, where applicable, for providing the driving fluid for eductors, without the introduction of additional water into the system; (ii) 2 per cent where segregated ballast tanks or dedicated clean ballast tanks are provided in accordance with Regulation 13 of these Regulations or where a cargo tank cleaning system using crude oil washing is fitted in accordance with Regulation 13B of these Regulations. This capacity may be further reduced to 1.5 per cent for such oil tankers where the tank washing arrangements are such that once the slop tank or tanks are charged with washing water, this water is sufficient for tank washing and, where applicable, for providing the driving fluid for eductors, without the introduction of additional water into the system;

(iii) 1 per cent for combination carriers where oil cargo is only carried in tanks with smooth walls. This capacity may be further reduced to 0.8 per cent where the tank washing arrangements are such that once the slop tank or tanks are charged with washing water, this water is sufficient for tank washing and, where applicable, for providing the driving fluid for eductors, without the introduction of additional water into the system. New oil tankers of 70,000 tons deadweight and above 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, baffles or weirs where fitted, so as to avoid excessive turbulence and entrainment of oil or emulsion with the water.

(3) (a) Every oil tanker shall be fitted with an oil discharge monitoring and control system, the design and installation of which is in compliance with the specification recommended by the Organisation and has been approved by the Minister. 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. This 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 10 (1) (a) of these Regulations. Any failure of this 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 a repair port. The oil discharge monitoring and control system shall be designed and installed in compliance with the Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers developed by the Organisation and approved by the Minister; (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 no time shall oil be discharged except in compliance with the conditions specified in Regulation 10 of these Regulations.

(4) The requirements of paragraphs (1), (2) and (3) of this Regulation shall not apply to oil tankers of less than 150 tons gross tonnage, for which the control of discharge of oil under Regulation 10 of these Regulations shall be effected by the retention of oil on board with subsequent discharge of all contaminated washings 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 10 of these Regulations are complied with.

(5) (a) The Minister may waive the requirements of paragraphs (1), (2) and (3) of this Regulation 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 engaged exclusively in trades between ports or terminals within a Party. 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 facilities available to receive such oily mixtures are adequate.

(b) The Minister may waive the requirements of paragraph (3) of this Regulation for oil tankers other than those referred to in subparagraph (a) of this paragraph in cases where: (i) the tanker is an existing oil tanker of 40,000 tonnes deadweight or above, as referred to in Regulation 13 C (1) of these Regulations, engaged in specific trades, and the conditions specified in Regulation 13 C (2) are complied with; or (ii) the tanker is engaged exclusively in one or more of the following categories of voyages:

(I) voyages within special areas; or

(II) voyages within 50 miles from the nearest land outside special areas where the tanker is engaged in:

(A) trades between ports or terminals of a Party; or

(B) restricted voyages as determined by the Minister and of 72 hours or less in duration;

provided that all of the following conditions are complied with: (1) all oily mixtures are retained on board for subsequent discharge to reception facilities;

(2) for voyages specified in subparagraph (b) (ii) (II) of this paragraph, the Minister has determined that adequate reception facilities are available to receive such oily mixtures in those oil loading ports or terminals the tanker calls at;

(3) the IOPP Certificate, when required, is endorsed to the effect that the ship is exclusively engaged in one or more or the

categories of voyages specified in subparagraphs (b) (ii) (I) and (b) (ii) (II) (B) of this paragraph; and

(4) the quantity, time, and port of the discharge are recorded in the Oil Record Book.

(6) Where in view of the Organisation equipment required by Regulation 10 (1) (a) (vi) of these Regulations and specified in

subparagraph (3) (a) of this Regulation 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 Organisation which shall satisfy the conditions of Regulation 10 (1) (a) of these Regulations except the obligation to have an oil discharge monitoring and control system in operation. (7) The requirements of paragraphs (1), (2) and (3) of this Regulation shall not apply to oil tankers carrying asphalt or other products subject to the provisions of these Regulations, which through their physical properties inhibit effective product/water separation and monitoring, for which the control of discharge under Regulation 10 of these Regulations shall be effected by the retention of residues on board with discharge of all contaminated washings to reception facilities.

REG 16

Oil discharge monitoring and control system and oil filtering equipment.

16. (1) The owner and master of a ship shall ensure that— (a) in case the ship is of 400 tons gross tonnage and above but less than 10,000 tons gross tonnage it is fitted with oil filtering equipment complying with paragraph (3) (b) of this Regulation; any such ship which carries large quantities of oil fuel complies with paragraph (1) (b) of this Regulation or paragraph (a) of Regulation 14 of these Regulations, and (b) in case the ship is of 10,000 tong gross tonpage and

(b) in case the ship is of 10,000 tons gross tonnage and above, it is provided with oil filtering equipment, and with arrangements for an alarm and for automatically stopping any discharge of oily mixture when the oil content in the effluent exceeds 15 parts per million.

(2) The Minister may waive the requirements of paragraph (1) of this Regulation for any ship engaged exclusively on voyages within special areas provided that all of the following conditions are complied with:

(a) the ship is fitted with a holding tank having a volume adequate, to the satisfaction of the Minister, for the total retention on board of the oily bilge water;

(b) all oily bilge water is retained on board for subsequent discharge to reception facilities;

(c) the Minister has determined that adequate reception facilities are available to receive such oily bilge water in a sufficient number of ports or terminals the ship calls at;

(d) the IOPP Certificate, when required, is endorsed to the effect that the ship is exclusively engaged on the voyages within special areas; and

(e) the quantity, time, and port of the discharge are recorded in the Oil Record Book.

(3) The owner of a ship shall ensure that—

(a) in case the ship is of less than 400 tons gross tonnage, it is equipped, as far as practicable, to the satisfaction of the Minister, to retain on board oil or oily mixtures or discharge them in accordance with the requirements of Regulation 10 (1) (b) of these Regulations, (b) oil filtering equipment referred to in paragraph (1) (a) of this Regulation is of a design approved by the Minister and shall be such as will ensure that any oily mixture discharged into the sea after passing through the system has an oil content not exceeding 15 parts per million. In considering the design of such equipment, the Minister shall have regard to the specification recommended by the Organisation, and

(c) the oil filtering equipment referred to in paragraph (1) (b) of this Regulation is of a design approved by the Minister and is such as will ensure that any oily mixture discharged into the sea after passing through the system or systems has an oil content not exceeding 15 parts per million and that it is provided with alarm arrangements to indicate when this level cannot be maintained and that the system is also provided with arrangements such as will ensure that any discharge of oily mixtures is automatically stopped when the oil content of the effluent exceeds 15 parts per million. In considering the design of such equipment and arrangements, the Minister shall have regard to the specification recommended by the Organisation.

(4) For ships delivered before 6 July, 1993 the requirements of this Regulation shall apply by 6 July, 1998, provided that these ships can operate with oily-water separating equipment (100 ppm equipment).

REG 17

Tanks for oil residues (sludge).

17. (1) The owner of a ship of 400 tons gross tonnage and above shall ensure that the ship is provided with a tank or tanks of adequate capacity, having regard to the type of machinery and length of voyage, to receive the oily residue (sludges) which cannot be dealt with otherwise in accordance with the requirements of these Regulations 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 the discharge of residues to reception facilities. Existing ships shall comply with this requirement as far as is reasonable and practicable.
(3) Piping to and from sludge tanks shall have no direct connection overboard, other than the standard discharge connection referred to in Regulation 19.

REG 18

Pumping, piping and discharge arrangements of oil tankers. 18. (1) The owner of an oil tanker shall ensure that— (a) in the tanker, a discharge manifold for connection to reception facilities for the discharge of dirty ballast water or oil contaminated water is located on the open deck on both sides of the ship;

(b) in the tanker, pipelines for the discharge to the sea of ballast water or oil contaminated water from cargo tank areas which may be permitted under Regulation 10 or Regulation 11 of these Regulations are led to the open deck or to the ship's side above the waterline in the deepest ballast condition. Different piping arrangements to permit operation in the manner permitted in paragraphs (1) (f) and (2) of this Regulation may be accepted; (c) in case the tanker is a new tanker, means are provided for stopping the discharge into the sea of ballast water or oil contaminated water from cargo tank areas, other than those discharges below the waterline permitted under paragraph (1) (f) of this Regulation, from a position on the upper deck or above located so that the manifold in use referred to in paragraph (1) (a) of this Regulation and the discharge to the sea from the pipelines referred to in paragraph (1) (b) of this Regulation may be visually observed. Means for stopping the discharge need not be provided at the observation position if a positive communication system such as a telephone or radio system is provided between the observation position and the discharge control position;

(d) in case the tanker is a new oil tanker and is required to be provided with segrated ballast tanks or fitted with a crude oil washing system, it complies with the following requirements:
(i) it shall be equipped with oil piping so designed and installed that oil retention in the lines is minimised; and

(ii) 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 line shall be provided and shall be connected outboard of the ship's manifold valves;

(e) in case the tanker is an existing crude oil tanker and is required to be provided with segregated ballast tanks, or to be fitted with a crude oil washing system, or to operate with dedicated clean ballast tanks, it complies with the provisions of paragraph (1) (d) (ii) of this Regulation, and

(f) the discharge of ballast water or oil contaminated water from cargo tank areas takes place above the waterline, except as follows:

(i) segregated ballast and clean ballast may be discharged below the waterline:

(I) in ports or at offshore terminals, or

(II) at sea by gravity,

provided that the surface of the ballast water has been examined immediately before the discharge to ensure that no contamination with oil has taken place.

(ii) existing oil tankers which, without modification, are not capable of discharging segregated ballast above the waterline may discharge segrated ballast below the waterline at sea, provided that the surface of the ballast water has been examined immediately before the discharge to ensure that no contamination with oil has taken place.

(2) (a) Existing oil tankers operating with dedicated clean ballast tanks, which without modification are not capable of discharging ballast water from dedicated clean ballast tanks above the warterline, may discharge this ballast below the waterline provided that the discharge of the ballast water is supervised in accordance with Regulation 13A (3) of these Regulations;
(b) on every oil tanker at sea, dirty ballast water or oil contaminated water from tanks in the cargo area, other than slop

tanks, may be discharged by gravity below the waterline, provided that sufficient time has elapsed in order to allow oil/water separation to have taken place and the ballast water has been examined immediately before the discharge with an oil/water interface detector referred to in Regulation 15 (3) (b) of these Regulations in order to ensure that the height of the interface is such that the discharge does not involve any increased risk of harm to the marine environment;

(c) on existing oil tankers at sea, dirty ballast water or oil contaminated water from cargo tank areas may be discharged below the waterline, subsequent to or in lieu of the discharge by the method referred to in subparagraph (b) of this paragraph, provided that:
(i) a part of the flow of such water is led through permanent piping to a readily accessible location on the upper deck or above where it may be visually observed during the discharge operation; and

(ii) such part flow arrangements comply with the requirements established by the Minister, which shall contain at least all the provisions of the Specifications for the Design, Installation and Operation of a Part Flow System for Control of Overboard Discharges adopted by the Organisation;

(d) the master of an oil tanker to which this paragraph applies shall ensure that this paragraph is complied with in relation to the tanker.

REG 19

19 Standard discharge connection.

19. To enable pipes of reception facilities to be connected with the ship's discharge pipeline for residues from machinery bilges, the owner of the ship shall ensure that both lines shall be fitted with a standard discharge connection in accordance with the following table:

STANDARD DIMENSIONS OF FLANGES FOR DISCHARGE CONNECTIONS

DescriptionDimensionOutside diameter215 mmInner diameterAccording to pipe outside diameterBolt circle diameter183 mmSlots in flange6 holes 22 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. The slot width to be 22 mmFlange thickness20 mmBolts and nuts:

quantity diameter6, each of 20 mm in diameter and of suitable length

The flange is designed to accept pipes up to a maximum internal diameter of 125 mm and shall be of steel or other equivalent material having a flat face. This flange, together with a gasket of oil-proof material, shall be suitable for a service pressure of 6 kg/cm2.

REG 20

Oil record book.

20. (1) Every oil tanker of 150 tons gross tonnage and above and every ship of 400 tons gross tonnage and above other than an oil tanker shall be provided by the owner with an Oil Record Book Part I (Machinery Space Operations). Every oil tanker shall also be provided by the owner with an Oil Record Book Part II (Cargo/Ballast Operations). The Oil Record Book, whether as a part of the ship's official log book or otherwise, shall be in the form specified in the Third Schedule to these Regulations or in a form to the like effect.

(2) The Oil Record book shall be completed on each occasion, on a tank-to-tank basis if appropriate, whenever any of the following operations take place in the ship:

(a) for machinery operations (all ships):

(i) ballasting or cleaning of oil fuel tanks;

(ii) discharge of dirty ballast or cleaning water from tanks

referred to under (i) of the subparagraph;

(iii) disposal of oily residues (sludge);

(iv) discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces.

(b) for cargo/ballast operations (oil tankers):

(i) loading of oil cargo;

(ii) internal transfer of oil cargo during voyage;

(iii) unloading of oil cargo;

(iv) ballasting of cargo tanks and dedicated clean ballast tanks;

(v) cleaning of cargo tanks including crude oil washing;

(vi) discharge of ballast except from segregated ballast tanks;

(vii) discharge of water from slop tanks;

(viii) closing of all applicable valves or similar devices after slop tank discharge operations;

(ix) closing of valves necessary for isolation of dedicated clean ballast tanks from cargo and stripping lines after slop tank discharge operations;

(x) disposal of residues.

(3) In the event of such discharge of oil or oily mixture as is referred to in section 11 of the Act or in the event of accidental or other exceptional discharge of oil not excepted by that section, a statement shall be made in the Oil Record Book of the circumstances of, and the reasons for, the discharge.

(4) Each operation specified in paragraph (2) of this Regulation shall be fully recorded without delay in the Oil Record Book so that all the entries in the book appropriate to that operation are completed. Each completed operation shall be signed by the officer or officers in charge of the operations concerned and each completed page shall be signed by the master of the ship.

(5) The Oil Record Book shall be kept in such a place as to be readily available for inspection at all reasonable times 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) An inspector may inspect the Oil Record Book on board any ship to which these Regulations apply while the ship is in a port or in an offshore terminal in the State 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. The inspection of an Oil Record Book and the taking of a certified copy by the inspector under this paragraph shall be performed as expeditiously as possible without causing the ship to be unduly delayed.
(7) The master of a ship to which this regulation applies shall ensure that paragraphs (2) to (5) are complied with in realtion to

the ship.

REG 21

Special requirements for drilling rigs and other platforms. 21. The owner and master of fixed and floating drilling rigs shall ensure that the said fixed and floating drilling rigs, when engaged in the exploration, exploitation and associated offshore processing of sea-bed mineral resources and other platforms comply with the requirements of these Regulations applicable to ships of 400 tons gross tonnage and above other than oil tankers, except that: (a) they shall be equipped as far as practicable with the installations required in regulations 16 and 17 of these Regulations; (b) a record of all operations involving oil or oily mixture discharges originating from platform drainage, shall be kept by the master in a form approved by the Minister; and (c) subject to the provisions of section 11 of the Act the discharge into the sea of oil or oily mixture originating from platform drainage, is hereby prohibited except when the oil content of the discharge without dilution does not exceed 15 parts per million.

PART III

Requirements for Minimising Oil Pollution from Oil Tankers due to Side and Bottom Damages

REG 22

Damage assumptions.

22. (1) For the purpose of calculating hypothetical oil outflow from oil tankers, three dimensions of the extent of damage of a parallelepiped on the side and bottom of the ship are assumed as follows. In the case of bottom damages two conditions are set forth to be applied individually to the stated portions of the oil tanker (a) side damage

(i) longitudinal extent (1c):1/3 L2/3 or 14.5 metres, whichever is less(ii) transverse extent (t c) (inboard from the ship's side at right angles to the centreline at the level corresponding to the assigned summer freeboard): or 11.5 metres, whichever is less.(iii) vertical extent (Vc):from the base line upwards without limit, (b) bottom damage

For 0.3L from the forward perpendicular of the shipAny other part of the ship(i) longitudinal extent (1s):or 5 metres, whichever is less(ii) transverse extent (ts): or 10 metres,5 metreswhichever is less but not less than 5 metres(iii) vertical extent from the base line (Vs): or 6 metres, whichever is less.

(2) Wherever the symbols given in this Regulation appear in this Part, they have the meaning as defined in this Regulation.

REG 23

Hypothetical outflow of oil.

23. (1) The hypothetical outflow of oil in the case of side damage (Oc) and bottom damage (Os) shall be calculated by the following formulae with respect to compartments breached by damage to all conceivable locations along the length of the ship to the extent as defined in Regulation 22 of these Regulations.

(a) for side damages:Oc = SWi + SKi Ci (I)(b) for bottom damages:Os = 1/3 (SZiWi + SZiCi (II)

where: Wi = volume of a wing tank in cubic metres assumed to be breached by the damage as specified in Regulation 22 of these Regulations; W1 for a segregated ballast tank may be taken equal to zero, Ci =volume of a centre tank in cubic metres assumed to be breached by the damage as specified in Regulation 22 of these Regulations; Ci for a segregated ballast tank may be taken equal to zero, Ki =1 - when bi is equal to or greater than tc, Ki shall be taken equal to zero, Zi=1 - when hi is equal to or greater than Vs, Zi shall be taken equal to zero, bi =width of wing tank in metres under consideration measured inboard from the ship's side at right angles to the centreline at the level corresponding to the assigned summer freeboard, hi = minimum depth of the double bottom in metres under consideration; where no double bottom is fitted hi shall be taken equal to zero.

Whenever symbols given in this paragraph appear in this Part, they have the meaning as defined in this Regulation.

(2) If a void space or segregated ballast tank of a length less than lc as defined in Regulation 22 of these Regulations is located between wing oil tanks, Oc in formula (I) in paragraph (1) (a) of this Regulation may be calculated on the basis of volume Wi being the actual volume of one such tank (where they are of equal capacity) or the smaller of the two tanks (if they differ in capacity) adjacent to such space, multiplied by Si as defined in this paragraph and taking for all other wing tanks involved in such a collision the value of the actual full volume.

where li = length in metres of void space or segregated ballast tank under consideration.

(3) (a) Credit shall only be given in respect of double bottom tanks which are either empty or carrying clean water when cargo is carried in the tanks above;

(b) where the double bottom does not extend for the full length and width of the tank involved, the double bottom is considered non-existent and the volume of the tanks above the area of the bottom damage shall be included in formula (II) in paragraph (1)
(b) of this Regulation even if the tank is not considered breached because of the installation of such a partial double bottom;
(c) suction wells may be neglected in the determination of the value hi provided such wells are not excessive in area and extend

below the tank for a minimum distance and in no case more than half the height of the double bottom. If the depth of such a well exceeds half the height of the double bottom, hi shall be taken equal to the double bottom height minus the well height. Piping serving such wells if installed within the double bottom shall be fitted with valves or other closing arrangements located at the point of connection to the tank served to prevent oil outflow in the event of damage to the piping. Such piping shall be installed as high from the bottom shell as possible. These valves shall be kept closed at sea at any time when the tank contains oil cargo, except that they may be opened only for cargo transfer needed for the purpose of trimming of the ship.

(4) In the case where bottom damage simultaneously involves four centre tanks, the value of Os may be calculated according to the formula

$Os = \frac{1}{4}$ (SZi Wi + SZi Ci) (III).

(5) The Minister may credit as reducing oil outflow in case of bottom damage, an installed cargo transfer system having an emergency high suction in each cargo oil tank, capable of transferring from a breached tank or tanks to segregated ballast tanks or to available cargo tankage if it can be assured that such tanks will have sufficient ullage. Credit for such a system would be governed by ability to transfer in two hours of operation oil equal to one half of the largest of the breached tanks involved and by availability of equivalent receiving capacity in ballast or cargo tanks. The credit shall be confined to permitting calculation of Os according to formula (III) in paragraph (4) of this Regulation. The pipes for such suctions shall be installed at least at a height not less than the vertical extent of the bottom damage vs.

REG 24

Limitation of size and arrangement of cargo tanks.

24. The owner of an oil tanker shall ensure that— (a) in case of the tanker is a new tanker, it complies with the provisions of this Regulation. In case the tanker is an existing tanker, that within one year after the commencement of these Regulations, it complies with the provisions of this Regulation if such a tanker falls into either of the following categories: (i) a tanker, the delivery of which is after 1 January, 1977; or (ii) a tanker to which both the following conditions apply: (I) delivery is not later than 1 January, 1977; and (II) the building contract is placed after 1 January, 1974, or in cases where no building contract has previously been placed, the keel is laid or the tanker is at a similar stage of construction after 30 June, 1974;

(b) cargo tanks of oil tankers are of such size and arrangements that the hypothetical outflow Oc or Os calculated in accordance with the provisions of Regulation 23 of these Regulations anywhere in the length of the ship does not exceed 30,000 cubic metres or 400 3ÖDW, whichever is the greater, but subject to a maximum of 40,000 cubic metres;

(c) the volume of any one wing cargo oil tank of an oil tanker does not exceed seventy-five per cent of the limits of the hypothetical oil outflow referred to in paragraph (b) of this Regulation; the volume of any one centre cargo oil tank does not exceed 50,000 cubic metres. However, in segregated ballast oil tankers as defined in Regulation 13 of these Regulations, the permitted volume of a wing cargo oil tank situated between two segregated ballast tanks, each exceeding lc in length, may be increased to the maximum limit of hypothetical oil outflow provided that the width of the wing tanks exceeds tc; (d) the length of each cargo tank does not exceed 10 metres or one of the following values, whichever is the greater: (i) where no longitudinal bulkhead is provided inside the cargo tanks:

but not to exceed 0.2L

(ii) where a centreline longitudinal bulkhead is provided inside the cargo tanks:

(iii) where two or more longitudinal bulkheads are provided inside the cargo tanks:

(I) for wing cargo tanks: 0.2L

(II) for centre cargo tanks:

(A) If is equal to or greater than one-fifth: 0.2L

(B) if is less than one-fifth:

-where no centreline longitudinal bulkhead is provided:

—where a centreline longitudinal bulkhead is provided:

(iv) bi is the minimum distance from the ship's side to the outer longitudinal bulkhead of the tank in question measured inboard at right angles to the centreline at the level corresponding to the assigned summer freeboard;

(e) in order not to exceed the volume limits established by paragraphs (b), (c) and (d) of this Regulation and irrespective of the accepted type of cargo transfer system installed, when such system interconnects two or more cargo tanks, valves or other similar closing devices are provided for separating the tanks from each other and that those valves or devices are kept closed when the tanker is at sea; and

(f) lines of piping which run through cargo tanks in a position less than tc from the ship's side or less than vc from the ship's bottom are fitted with valves or similar closing devices at the point at which they open into any cargo tank and that those valves are kept closed at sea at any time when the tanks contain cargo oil, except that they may be opened only for cargo transfer needed for the purpose of trimming of the ship.

REG 25

Subdivision and stability.

25. (1) The owner of a new oil tanker shall ensure that it stability, complies with the subdivision and damage stability criteria as specified in paragraph (3) of this Regulation, after the assumed side or bottom damage as specified in paragraph (2) of this Regulation, for any operating draught reflecting actual partial or full load conditions consistent with trim and strength of the ship as well as specific gravities of the cargo and that such damage is applied to all conceivable locations along the length of the ship as follows:

(a) in tankers of more than 225 metres in length, anywhere in the ship's length;

(b) in tankers of more than 150 metres, but not exceeding 225 metres in length, anywhere in the ship's length except involving either after or forward bulkhead bounding the machinery space located aft. The machinery space shall be treated as a single floodable compartment; and

(c) in tankers not exceeding 150 metres in length, anywhere in the ship's length between adjacent transverse bulkheads with the exception of the machinery space. For tankers of 100 metres or less in length where all requirements of paragraph (3) of this Regulation cannot be fulfilled without materially impairing the operational qualities of the ship, the Minister may exempt the ship from compliance with the requirements concerned.

Ballast conditions where the tanker is not carrying oil in cargo tanks excluding any oil residues, shall not be considered.

(2) The following provisions regarding the extent and the character of the assumed damage shall apply:

(a) side damage

(i) longitudinal extent: 1/3 (L2/3) or 14.5 metres, whichever is less (ii) transverse extent (Inboard from the ship's side at right angles to the centreline at the level of the summer load line): or 11.5 metres, whichever is less (iii) vertical extent: From the moulded line of the bottom shell plating at centreline, upwards without limit; (b) bottom damageFor 0.3L from the forward perpendicular of the shipAny other part of the ship (i) longitudinal extent: 1/3 (L2/3) or 14.5 metres, whichever is less1/3 (L2/3) or 5 metres, whichever is less (ii) transverse extent: or 10 meters, whichever is less or 5 meters whichever is less (iii) vertical extent: or 6 meters, whichever is less, measured from the moulded line of the bottom shell plating at centreline or 6 meters, whichever is less, measured from the moulded line of the bottom shell plating at centreline;

(c) if any damage of a lesser extent than the maximum extent of damage specified in subparagraphs (a) and (b) of this paragraph would result in a more severe condition, such damage shall be considered;

(d) where the damage involving transverse bulkheads is envisaged as specified in paragraphs (1) (a) and (b) of this Regulation, transverse watertight bulkheads shall be spaced at least at a distance equal to the longitudinal extent of assumed damage specified in paragraph (1) (a) of this Regulation in order to be considered effective. Where transverse bulkheads are spaced at a lesser distance, one or more of these bulkheads within such extent of damage shall be assumed as non-existent for the purpose of determining flooded compartments;

(e) where the damage between adjacent transverse watertight bulkheads is envisaged as specified in paragraph (1) (c) of this Regulation, no main transverse bulkhead or a transverse bulkhead bounding side tanks or double bottom tanks shall be assumed damaged, unless:

(i) the spacing of the adjacent bulkheads is less than the

longitudinal extent of assumed damage specified in subparagraph (a) of this paragraph; or

(ii) there is a step or a recess in a transverse bulkhead of more than 3.05 metres in length, located within the extent of penetration of assumed damage. The step formed by the after peak bulkhead and after peak tank top shall not be regarded as a step for the purpose of this Regulation;

(f) if pipes, ducts or tunnels are situated within the assumed extent of damage, arrangements shall be made so that progressive flooding cannot thereby extend to compartments other than those assumed to be floodable for each case of damage.

(3) Oil tankers shall be regarded as complying with the damage stability criteria if the following requirements are met:

(a) the final waterline, taking into account sinkage, heel and trim, shall be below the lower edge of any opening through which progressive flooding may take place. Such openings shall include air-pipes and those which are closed by means of weathertight doors or hatch covers and may exclude those openings closed by means of watertight manhole covers and flush scuttles, small watertight cargo tank hatch covers which maintain the high integrity of the deck, remotely operated watertight sliding doors, and side scuttles of the non-opening type;

(b) in the final stage of flooding, the angle of heel due to unsymmetrical flooding shall not exceed 25 degrees, provided that this angle may be increased up to 30 degrees if no deck edge immersion occurs;

(c) the stability in the final stage of flooding shall be investigated and may be regarded as sufficient if the righting lever curve has at least a range of 20 degrees beyond the position of equilibrium in association with a maximum residual righting lever of at least 0.1 metre within the 20 degrees range; the area under the curve within this range shall not be less than 0.0175 metre radians. Unprotected openings shall not be immersed within this range unless the space concerned is assumed to be flooded. Within this range, the immersion of any of the openings listed in subparagraph (a) of this paragraph and other openings capable of being closed weathertight may be permitted;

(d) the Minister shall be satisfied that the stability is sufficient during intermediate stages of flooding; and (e) equalisation arrangements requiring mechanical aids such as valves or cross-levelling pipes, if fitted, shall not be considered for the purpose of reducing an angle of heel or attaining the minimum range of residual stability to meet the requirements of subparagraphs (a), (b) and (c) of this paragraph and sufficient residual stability shall be maintained during all stages where equalisation is used. Spaces which are linked by ducts of a large cross-sectional area may be considered to be common.

(4) The requirements of paragraph (1) of this Regulation shall be confirmed by calculations which take into consideration the design characteristics of the ship, the arrangements, configurations and contents of the damaged compartments; and the distribution, specific gravities and the free surface effect of liquids. The calculations shall be based on the following:

(a) account shall be taken of any empty or partially filled tank, the specific gravity of cargoes carried, as well as any

outflow of liquids from damaged compartments;

(b) the permeabilities assumed for spaces flooded as a result of damage shall be as follows:—

Spaces Permeabilitiesappropriated to stores0.60occupied by accommodation 0.95occupied by machinery0.85voids0.95intended for consumable liquids0 to 0.95*intended for other liquids0 to 0.95*;

*The permeability of partially filled compartments shall be consistent with the amount of liquid carried in the compartment. Whenever damage penetrates a tank containing liquids, it shall be assumed that the contents are completely lost from that compartment and replaced by salt water up to the level of the final plane of equilibrium.

(c) the buoyancy of any superstructure directly above the side damage shall be disregarded. The unflooded parts of superstructures beyond the extent of damage, however, may be taken into consideration provided that they are separated from the damaged space by watertight bulkheads and the requirements of paragraph (3) (a) of this Regulation in respect of these intact spaces are complied with. Hinged watertight doors may be acceptable in watertight bulkheads in the superstructure;

(d) the free surface effect shall be calculated at an angle of heel of 5 degrees for each individual compartment. The Minister may require or allow the free surface corrections to be calculated at an angle of heel greater than 5 degrees for partially filled tanks; and

(e) in calculating the effect of free surfaces of consumable liquids it shall be assumed that, for each type of liquid at least one transverse pair or a single centreline tank has a free surface and the tank or combination of tanks to be taken into account shall be those where the effect of free surfaces is the greatest.
(5) The master of every new oil tanker and the person in charge of a non-self-propelled oil tanker to which these Regulations apply shall be supplied by the owner in an approved form with:
(a) information relative to loading and distribution of cargo necessary to ensure compliance with the provisions of this Regulation; and

(b) data on the ability of the ship to comply with damage stability criteria as determined by this Regulation, including the effect of relaxations that may have been allowed under paragraph (1)(c) of this Regulation.

PART IV.

Prevention of pollution arising from an oil pollution incident

REG 26

Shipboard oil pollution emergency plan.

26. (1) The owner of an oil tanker of 150 tons gross tonnage and above and every ship other than an oil tanker of 400 tons gross tonnage and above shall ensure that there is carried on board a shipboard oil pollution emergency plan approved by the Minister. In the case of ships built before 4 April, 1993 this requirement shall

apply 24 months after that date.(2) Such a plan shall be in accordance with guidelines developed by the Organisation and written in the English language. The plan shall consist at least of:the procedure to be followed by the master or other persons having

charge of the ship to report an oil pollution incident based on the guidelines developed by the Organisation.

FIRST SCHEDULE

List of Oils*

Asphalt solutionsGasoline Blending StocksBlending StocksAlkylates fuelRoofers FluxReformatesStraight Run ResiduePolymer fuelOilsGasolinesClarifiedCasinghead (natural)Crude OilAutomotiveMixtures containing crude oilAviationDiesel OilStraight RunFuel Oil No. 4Fuel Oil No. 1 (Kerosene)Fuel Oil No. 5Fuel Oil No. 1-DFuel Oil No. 6Fuel Oil No. 2Residual Fuel OilFuel Oil No. 2-DRoad OilTransformer OilJet FuelsAromatic Oil (excluding vegetable oil) JP-1 (Kerosene) Lubricating Oils and Blending StocksJP-3Mineral OilJP-4Motor OilJP-5 (Kerosene, Heavy)Penetrating OilTurbo FuelSpindle OilKeroseneTurbine OilMineral SpiritDistillates.NaphthaStraight Run SolventFlashed Feed StocksPetroleumHeartcut Distillage OilGas OilCracked *This list of oils shall not necessarily be considered as comprehensive.

SECOND SCHEDULE

International Oil Pollution Prevention Certificate (Note: This Certificate shall be supplemented by a Record of Construction and Equipment) Issued under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 relating thereto, and as amended by resolution MEPC, 39 (29), (hereinafter referred to as "the Convention") under the authority of the Government of Ireland by the Minister for the Marine. Particulars of ship

Name of ship	Distinctive
number or letters	Port
of registry	Gross
tonnage	Deadweight
of ship (metric tons)f	eud « ergin
Number	
Type of ship *: Oil tanker	

Ship other than an oil tanker with cargo tanks coming under Regulation 2 (2) of Annex I of the Convention. Ship other than any of the above.	
This is to certify. 1. That the ship has been surveyed in accordance with Regulation 4 of Annex I of the Convention.	
2. That the survey shows that the structure, equipment, systems, fittings, arrangements and material of the ship and the condition thereof are in all respects satisfactory and that the ship complies with the applicable requirements of Annex I of the Convention.	
This Certificate is valid until	
subject to surveys in accordance with Regulation 4 of Annex I of the convention.Issued at	
(Place of issue of Certificate)	(
Date of Issue)(Signature of duly authorised official issuing the Certificate)	
(Seal or stamp of the authority, as appropriate) ffor oil tankers	
*Delete as appropriate ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEY THIS IS TO CERTIFY that, at a survey required by Regulation 4 of Annex I of the Convention, the ship was found to comply with the	S
relevant provisions of the Convention:	
Annual survey.Signed	
(Signature of duly authorised official)Place	Date (Seal
or stamp of the authority, as appropriate)Annual/ Intermediate* survey:Signed	X X
(Signature of duly authorised official) Place	.Date
or stamp of the authority, as appropriate)Annual/ Intermediate* survey:Signed	(Seal
(Signature of duly authorised official)Place	.Date
or stamp of the authority, as appropriate)Annual survey:Signed	(Seal
(Signature of duly authorised official)Place	.Date
or stamp of the outhority of appropriate)	(Seal
*Delete as appropriate Annual/intermediate survey in accordance with Regulation 8 (8) (c)	
THIS IS TO CERTIFY that, at an annual/intermediate* survey in	

accordance with Regulation 8 (8) (c) of Annex I of the Convention, the ship was found to comply with the relevant provisions of the Convention.

Signed

..... (Signature of duly authorised official)PlaceDate or stamp of the authority, as appropriate) Endorsement to extend the Certificate if valid for less than 5 years where Regulation 8 (3) applies The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with Regulation 8 (3) of Annex I of the Convention, be accepted as valid until Signed (Signature of duly authorised official)PlaceDate or stamp of the authority, as appropriate) Endorsement where the renewal survey has been completed and Regulation 8 (4) applies The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with Regulation 8 (4) of Annex I of the Convention, be accepted as valid until Signed (Signature of duly authorised official)Place Date(Seal or stamp of the authority, as appropriate) Endorsement to extend the validity of the Certificate until reaching the port of survey or for a period of grace where Regulation 8 (5) or 8(6) applies This Certificate shall, in accordance with Regulations 8 (5) or 8 (6)* of Annex I of the Convention, be accepted as valid until Signed (Signature of duly authorised official)PlaceDate(seal or stamp of the authority, as appropriate) *Delete as appropriate Endorsement for advancement of anniversary date where Regulation 8 (8) applies In accordance with Regulation 8 (8) of Annex I of the Convention, the new anniversary date is

Signed

(Simulations of duly outboning d off sight)
(Signature of duly authorised official)Place
(Seal
or stamp of the authority, as appropriate)
the new anniversary date is
Signed
(Signature of duly authorised official)Place
Date
(Seal
or stamp of the authority, as appropriate)
Supplement to the International Oil Pollution Prevention Certificate
(IOPP Certificate)
RECORD OF CONSTRUCTION AND EQUIPMENT FOR SHIPS OTHER THAN OIL
TANKERS
Convention for the Prevention of Pollution from Ships, 1973, as
modified by the Protocol of 1978 relating thereto (hereinafter
referred to as "the Convention").
Notes: 1. This form is to be used for the third type of ships as
the above" For oil tankers and ships other than oil tankers with
cargo tanks coming under regulation 2 (2) of Annex I of the
Convention, Form B shall be used.2. This Record shall be permanently
attached to the IOPP Certificate. The IOPP Certificate shall be
available on board the ship at all times. 3. If the language of the
include a translation into one of these languages.4. Entries in
boxes shall be made by inserting either a cross (X) for the
answers "yes" and "applicable" or a dash () for the answers "no"
and "not applicable" as appropriate.5. Regulations mentioned in this
resolutions refer to those adopted by the International Maritime
Organisation.
1 Particulars of ship.1.1 Name of ship
Port of registry
Gross tonnage
Date of building contract
1.5.2
Llate on which lead was laid on shin was at a similar stage of

Date on which keel was laid or ship was at a similar stage of

construction1.5.3 Date of delivery	1.6
Major conversion (if applicable)	1.6.1
Date of conversion contract	1.6.2
Date on which conversion was commenced	1.0.2
Date of completion of conversion	
1.7 Status of ship:1.7.1 New ship in accordance with regulation 1 (6) \Box 1.7.2 Existing ship in accordance with regulation 1 (7) \Box 1.7.3 T ship has been accepted by the Minister as an "existing ship" under regulation 1 (7) due to unforseen delay in delivery,,2 Equipment for the control of oil discharge from machinery space bilges and oil fuel tanks (regulations 10 and 16)2.1 Carriage of ballast water in oil fuel tanks:2.1.1 The ship may under normal conditions carry ballast wat in oil fuel tanks.,2.2 Type of oil filtering equipment fitted:2.2.1 Oil filtering (15 ppm) equipment (regulation 16 (4)) \Box 2.2.2 Oil filtering (15 ppm)equipment with alarm and automatic stopping dev (regulation 16 (5)) \Box 2.3 The ship is allowed to operate with the existing equipment until 6 July, 1998 (regulation 16 (6)) and fitted with:2.3.1 Oily-water separating (100 ppm) equipment \Box 2.3.2 Oil filtering (15 ppm) equipment without alarm,,2.3.3 Oil filtering (15 ppm) equipment with alarm and manual stopping device,,2.4 Appro standards:2.4.1 The separating/filtering equipment: .1 has been approved in accordance with resolution A.233 (VII) \Box .3 has been approved in accordance with national standards not based upon resolution A.393(X) or A.233(VII) \Box .4 has not been approved \Box 2.4. process unit has been approved in accordance with resolution A.444(XI) \Box 2.4.3 The oil content meter has been approved in accord with the resolution A.393(X),,2.5 Maximum throughput of the syste 	The r er vice val .2 The dance em is
Waiver of regulation 16:2.6.1 The requirements of regulation 16 (1) or (2) are waived in respect of the ship in accordance with regulation 16 (3) (a). The ship is engaged exclusively on: .1 voyages within special area(s):)
.2 voyages within 12 miles of the nearest land outside special area(s) restricted to:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
.2 The ship is fitted with holding tank(s) having a volume of m3 for the total retention on board of all oily bilge water□,,3 Means for retention and disposal of oil residues (sludge) (regulation 17) 3.1 The ship is provided with oil residue (sludge) tanks as follows:	,□2.6

Tank identificationTankLocationVolume(m3)Frames (from) - (to)Lateral

PositionTotal volume:

..... m³ 3.2 Means for the disposal of residues in addition to the provisions of sludge tanks:3.2.1 Incinerator for oil residues, capacity $1/h_{,,}$ 3.2.2 Auxiliary boiler suitable for burning oil residues $\Box_{,,}$ 3.2.3 Tank for mixing oil residues with fuel oil, capacity acceptable means:.... Standard discharge connection. (regulation 19)4.1 The ship is provided with a pipeline for the discharge of residues from machinery bilges to reception facilities, fitted with a standard discharge connection in accordance with regulation 19,, 5 Shipboard oil pollution emergency plan (regulation 26)5.1 The ship is provided with a shipboard oil pollution emergency plan in compliance with regulation $26.,\Box 6$ Exemption6.1 Exemptions have been granted by the Administration from the requirements of Chapter II of Annex I of the Convention in accordance with regulation 2 (4) (a) on those items listed under paragraph (s) of this Record, 7 Equivalents (regulation 3)7.1 Equivalents have been approved by the Minister for certain requirements of Annex I listed under paragraph(s) of this Record., \Box THIS IS TO CERTIFY that this Record is correct in all respects. Issued at of issue of the Record)..... 19 of duly authorised official issuing the Record)(Official Stamp) Form B Supplement to the International Oil Pollution Prevention Certificate (IOPP Certificate) RECORD OF CONSTRUCTION AND EQUIPMENT FOR OIL TANKERS in respect of the provisions of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention"). Notes: 1. This form is to be used for the first two types of ships

as categorised in the IOPP Certificate, i.e. "oil tankers" and "ships" other than oil tankers with cargo tanks coming under regulation 2 (2) of Annex I of the Convention. For the third type of ships as categorised in the IOPP Certificate, Form A shall be

used.2. This Record shall be permanently attached to the IOPP Certificate. The IOPP Certificate shall be available on board the ship at all times.3. If the language of the original Record is neither English nor French, the text shall include a translation into one of these languages.4. Entries in boxes shall be made by inserting either a cross (x) for the answers "yes" and "applicable" or a dash (—) for the answers "no" and "not applicable" as appropriate.5. Unless otherwise stated, regulations mentioned in this Record refer to regulations of Annex I of the Convention and resolutions refer to those adopted by the International Maritime Organisation. 1 Particulars of ship1.1 Name of ship	
Distinctive number or letters1.3 Port of registry	Z
Gross tonnage	5
Carrying capacity of ship	,
(m ³)1.6 Deadweight of ship	
(metric tons) (regulation 1 (22))1.7 Length of ship	
(m) (regulation 1 (18))1.8 Date of build:1.8.1 Date of building contract	
Date on which keel was laid or ship was at a similar stage of construction	
Major conversion (if applicable): 1.9.1 Date of conversion contract	
Date on which conversion was commenced	
Date of completion of conversion	
1.10 Status of ship:1.10.1 New ship in accordance with regulation 1 (6),, \Box 1.10.2 Existing ship in accordance with regulation 1 (7),, \Box 1.10.3 New oil tanker in accordance with regulation 1 (26),, \Box 1.10.4 Existing oil tanker in accordance with regulation 1 (27),, \Box 1.10.5 The ship has been accepted by the Minister as an "existing ship" under regulation 1 (7) due to unforeseen delay in delivery,, \Box 1.10.6 The ship has been accepted by the Minister as an "existing oil tanker" under regulation 1 (27) due to unforeseen delay in delivery,, \Box 1.10.7 The ship is not required to comply with the provisions of regulation 24 due to unforeseen delay in delivery,, \Box 1.11 Type of ship:1.11.1 Crude oil tanker ,, \Box 1.11.2.Product carrier ,, \Box 1.11.3 Crude oil/product carrier ,, \Box 1.11.4 Combination carrier,, \Box 1.11.5 Ship, other than an oil tanker, with cargo tanks coming under regulation 2 (2) of Annex I of the Convention,, \Box 1.11.6 Oil tanker dedicated to the carriage of products referred to in regulation 15 (7),, \Box 1.11.7 The ship, being designated as a "crude oil tanker" operating with COW, is also designated as a "product carrier" operating with CBT, for which a separate IOPP Certificate has also been issued,, \Box 1.11.8 The ship, being designated as a "product carrier" operating with CBT, is also designated as a	

"crude oil tanker" operating with COW, for which a separate IOPP Certificate has also been issued,, 1.11.9 Chemical tanker carrying oil,, 2 Equipment for the control of oil discharge from machinery space bilges and oil fuel tanks (regulations 10 and 16)2.1 Carriage of ballast water in oil fuel tanks:2.1.1 The ship may under normal conditions carry ballast water in oil fuel tanks,,□2.2 Type of oil filtering equipment fitted:2.2.1 Oil filtering (15 ppm) equipment (regulation 16 (4)), \Box 2.2.2 Oil filtering (15 ppm) equipment with alarm and automatic stopping device (regulation 16 (5)) $\square 2.3$ The ship is allowed to operate with the existing equipment until 6 July, 1998 (regulation 16 (6)) and fitted with:2.3.1 Oily water separating (100 ppm) equipment "2.3.2 Oil filtering (15 ppm) equipment without alarm "2.3.3 Oil filtering (15 ppm) equipment with alarm and manual stopping device "2.4 Approval standards:2.4.1 The separating/filtering system: .1 has been approved in accordance with resolution A.393 (X) \square .2 has been approved in accordance with resolution A.233 (VII) "□ .3 has been approved in accordance with national standards not based upon resolution A.393 (X) or A.233 (VII) " \Box .4 has not been approved " \Box 2.4.2 The process unit has been approved in accordance with resolution A.444 (XI) $\Box 2.4.3$ The oil content meter has been approved in accordance with resolution A.393 (X) \Box 2.5 Maximum throughput of the system is - - m3/h2.6 Waiver of regulation 16:2.6.1 The requirements of regulation 16 (1) or (2) are waived in respect of the ship in accordance with regulation 16 (3) (a). The ship is engaged exclusively on: .1 voyages within special area(s):2 voyages within 12 miles of the nearest land outside special area(s) restricted to: 2 The ship is fitted with holding tank(s) having a volume of m³ for the total retention on board of all oily bilge water, 2.6.3 In lieu of the holding tank the ship is provided with arrangements to transfer bilge water to the slop tank $,,\Box$ 3 Means for retention and disposal of oil residues (sludge) (regulation 17) 3.1 The ship is provided with oil residue (sludge) tanks as follows: Tank identificationTankLocationVolume (m³)Frames (from) - (to)Lateral PositionTotal volume 3.2 Means for the disposal of residues in addition to the provisions of sludge tanks: 3.2.1 Incinerator for oil residues, capacity 1/h,, 3.2.2 Auxiliary boiler suitable for burning oil residues, 3.2.3 Tank for mixing oil residues with fuel oil, capacity m³,, 3.2.4 Other acceptable

Standard discharge connection

(regulation 19)4.1 The ship is provided with a pipeline for the discharge of residues from machinery bilges to reception facilities, fitted with a standard discharge connection in compliance with regulation 19,,, \Box 5 Construction (regulations 13, 24 and 25)5.1 In accordance with the requirements of regulation 13, the ship is:5.1.1 Required to be provided with SBT, PL and COW,,, \Box 5.1.2 Required to be provided with SBT and PL,,, \Box 5.1.3 Required to be provided with SBT,, \Box 5.1.4 Required to be provided with SBT or COW,,, \Box 5.1.5 Required to be provided with SBT or CBT,,, \Box 5.1.6 Not required to comply with the requirements of regulation 13,, \Box 5.2 Segregated ballast tanks (SBT):5.2.1 The ship is provided with SBT in compliance with regulation 13,, \Box 5.2.2 The ship is provided with SBT, in compliance with regulation 13, which are arranged in protective locations (PL) in compliance with regulation 13E,, \Box 5.2.3 SBT are distributed as follows:

TankVolume (m³)TankVolume (m³)Total volume:

m³ 5.3 Dedicated clean ballast tanks (CBT):5.3.1 The ship is provided with CBT in compliance with regulation 13A, and may operate as a product carrier 5.3.2 CBT are distributed as follows: TankVolume (m³)TankVolume (m³)Total volume:

.....

m³

...., \Box 5.4.4 The ship is not required to be but is equipped with COW in compliance with the safety aspects of the Revised COW Specifications (resolution A.446 (XI)), \Box 5.5 Exemption from regulation 13:5.5.1 The ship is solely engaged in trade between

.....

.....

in accordance with regulation 13C and is, therefore, exempted from the requirements of regulation 13 \Box ,,5.5.2 The ship is operating with special ballast arrangements in accordance with regulation 13D and is, therefore, exempted from the requirements of regulation 13 \Box ,,5.6 Limitation of size and arrangements of cargo tanks (regulation 24):5.6.1 The ship is required to be constructed according to, and

complies with, the requirements of regulation $24 \square$, 5.6.2 The ship is required to be constructed according to, and complies with, the requirements of regulation 24 (4) (see regulation 2 (2)) \Box ,,5.7 Subdivision and stability (regulation 25):5.7.1 The ship is required to be constructed according to, and complies with, the requirements of regulation 25, ,, 5.7.2 Information and data required under regulation 25 (5) have been supplied to the ship in an approved form \Box 5.8 Double hull construction: 5.8.1 The ship is required to be constructed according to regulation 13F and complies with the requirements of:, .1 paragraph (3) (double-hull construction) \Box , .2 paragraph (4) (mid-height deck tankers with double side construction) $,,\Box$.3 paragraph (5) (alternative method approved by the Marine Environment Protection Committee) " 5.8.2 The ship is required to be constructed according to and complies with the requirements of regulation 13F (7) (double bottom requirements) \Box ,,5.8.3 The ship is not required to comply with the requirements of regulation 13F \Box ,,5.8.4 The ship is subject to regulation 13G and: .1 is required to comply with regulation 13F not later than .2 is so arranged that the following tanks or spaces are not used for the carriage of oil ship is not subject to regulation 13G,,□6 Retention of oil on board (regulation 15).6.1 Oil discharge monitoring and control system:6.1.1 The ship comes under category oil tanker as defined in resolution A.496 (XII) or A.586 (14)* (delete as appropriate), $\Box 6.1.2$ The system comprises: .1 control unit " \square .2 computing unit " \square .3 calculating unit " \square 6.1.3 The system is: .1 fitted with a starting interlock \square .2 fitted with automatic stopping device $\square 6.1.4$ The oil content meter is approved under the terms of resolution A.393 (X) or A.586 (14) (delete as appropriate) suitable for: .1 crude oil \square .2 black products \square .3 white products \square .4 oil-like noxious liquid substances as listed in the attachment to the certificate $,,\square 6.1.5$ The ship has been supplied with an operations manual for the oil discharge monitoring and control system $\Box = 6.2$ Slop tanks: 6.2.1 The ship is provided with dedicated slop tank(s) with the total capacity of m³, which is per cent of the oil carrying capacity, in accordance with: .1 regulation 15 (2) (c) "□ .2 regulation 15 (2) (c) (i) "□ .3 regulation 15 (2) (c) (ii) \square .4 regulation 15 (2) (c) (iii) \square 6.2.2 Cargo tanks have been designated as slop tanks "□6.3 Oil/water interface detectors: 6.3.1 The ship is provided with oil/water interface detectors approved under the terms of resolution MEPC. 5 (XIII) " *Oil tankers the keels of which are laid, or which are at a similar stage of construction, on or after 2 October, 1986, should be fitted with a system approved under resolution A.586 (14).

6.4 Exemptions from regulation 15:6.4.1 The ship is exempted from the requirements of regulation 15 (1), (2) and (3) in accordance with regulation 15 (7),, \Box 6.4.2 The ship is exempted from the requirements of regulation 15 (1), (2) and (3) in accordance with regulation 2 (2),, \Box 6.5 Waiver of regulation 15:6.5.1 The requirements

of regulation 15 (3) are waived in respect of the ship in accordance with regulation 15 (5) (b). The ship is engaged exclusively on: .1 specific trade under regulation 13C:
2 vovages within special area(s)
.3 voyages within 50 miles of the nearest land outside special area(s) of 72 hours or less in duration restricted to:
Pumping nining and discharge arrangements
(regulation 18)7.1 The overboard discharge outlets for segregated
ballast are located 7 1.1 Above the waterline $\Box 7$ 1.2 Below the
waterline $ \Box 7.2$ The overboard discharge outlets, other than the
discharge manifold, for clean ballast are located:*7.2.1 Above the
waterline $$ \Box 7.2.2 Below the waterline $$ \Box 7.3 The overboard discharge
outlets, other than the discharge manifold, for dirty ballast water
or oil-contaminated water from cargo tank areas are located:*7.3.1
Above the waterline $, \Box 7.3.2$ Below the waterline in conjunction with
the part flow arrangements in compliance with regulation 18 (6) (e)
$,\Box$ 7.3.3 Below the waterline $,\Box$ 7.4 Discharge of oil from cargo pumps
and oil lines (regulation 18 (4) and (5)):7.4.1 Means to drain
all cargo pumps and oil lines at the completion of cargo discharge:
.1 drainings capable of being discharged to a cargo tank or slop
tank "□
*Only those outlets which can be monitored are to be indicated.
2 for discharge eshere a special small diameter line is provided 8
Shiphoard oil pollution emergency plan
(regulation 26)8.1 The shin is provided with a shinboard oil
pollution emergency plan in compliance with regulation 26
Equivalent arrangements for chemical tankers carrying oil9.1 As
equivalent arrangements for the carriage of oil by a chemical
tanker, the ship is fitted with the following equipment in lieu of
slop tanks (paragraph 6.2 above) and oil/water interface detectors
(paragraph 6.3 above):9.1.1 Oily-water separating equipment capable of
producing effluent with oil content less than 100 ppm, with the
capacity of
m ³ /h.,, \Box 9.1.2 A holding tank with the capacity of
m^3 , $\Box 9.1.3$ A tank for collecting tank washings which is: .1 a
dedicated tank \Box_{i} .2 a cargo tank designated as a collecting tank
, 9.1.4 A permanently instance transfer pump for overboard discharge
$\Box 0.2$ The oily-water separating equipment has been approved under the
$\frac{1}{2}$ the only-water separating equipment has been approved under the terms of resolution A 393 (X) and is suitable for the full range
of Annex I products $\Box 9.3$ The ship holds a valid Certificate of
Fitness for the Carriage of Dangerous Chemicals in Bulk 10
Oil-like noxious liquid substances 10.1 The ship is permitted, in
accordance with regulation 14 of Annex I of the Convention, to
carry oil-like noxious liquid substances specified in the list*
attached "11 Exemption11.1 Exemptions have been granted by the
Administration from the requirements of Chapters II and III of Annex

0.1 : =	
of this Reco *The list of	rd,,□ oil-like substances permitted for carriage, signed.
dated and c	ertified by a seal or a stamp of the issuing authority,
shall be atta	ched.
12 Equivale	nts
(regulation	3)12.1 Equivalents have been approved by the
Administrat	ion for certain requirements of Annex I on those items
	paragraph(s)
THIS IS TO	CERTIFY that this Record is correct in all respects.
Issued at	
of issue of t	he Record) 19
of duly out	ericad official issuing the Record/(Scal or stamp of the
issuing auth	ority, as appropriate)
THIRD SC	HEDULE
Form of Oi	Record Book
OIL RECO	RD BOOK
PART I	
(All ships)	space operations
Name of sh	p
number or l	D
Gross tonna	ge
Period from	to
Note: Oil R	ecord Book Part I shall be provided to every oil tanker
of 150 tons	gross tonnage and above and every ship of 400 tons
machinery	space operations. For oil tankers. Oil Record Book Part II
shall also be	e provided to record relevant cargo/ballast operations.
INTRODU	CTION
The followi	ng pages of this section show a comprehensive list of
items of ma	chinery space operations which are, when appropriate, to
be recorded	in the Oil Record Book in accordance with regulation 20
OI Annex I	on the international Convention for the Prevention of particular sectors and the protocol of 1079
relating the	eto (MARPOL 73/78). The items have been grouned into
renaring the	the formation of the forms have been grouped into

When making entries in the Oil Record Book, the date, operational code and item number shall be inserted in the appropriate columns and the required particulars shall be recorded chronologically in the blank spaces.

Each completed operation shall be signed for and dated by the officer or officers in charge. Each completed page shall be signed by the master of the ship.

The Oil Record Book contains many references to oil quantity. The limited accuracy of tank measurement devices, temperature variations and clingage will affect the accuracy of these readings. The entries in the Oil Record Book should be considered accordingly.

LIST OF ITEMS TO BE RECORDED

(A) Ballasting or cleaning of oil fuel tanks

1. Identity of tank(s) ballasted.

2. Whether cleaned since they last contained oil and, if not, type

of oil previously carried.

3. Cleaning process:

.1 position of ship and time at the start and completion of

cleaning;

.2 identify tank(s) in which one or another method has been

employed (rinsing through, steaming, cleaning with chemicals; type and quantity of chemicals used);

.3 identify of tank(s) into which cleaning water was transferred.

4. Ballasting:

.1 position of ship and time at start and end of ballasting;

.2 quantity of ballast if tanks are not cleaned;

.3 position of ship at start of cleaning;

.4 position of ship at start of ballasting.

(B) Discharge of dirty ballast or cleaning water from oil fuel

tanks referred to under section (A)

5. Identity of tank(s).

6. Position of ship at start of discharge.

7. Position of ship on completion of discharge.

8. Ship's speed(s) during discharge.

9. Method of discharge:

.1 through 100 ppm equipment;

.2 through 15 ppm equipment;

.3 to reception facilities.

10. Quantity discharged.

(C) Collection and disposal of oil residues (sludge)

11. Collection of oil residues.

Quantities of oil residues (sludge) retained on board at the end of a voyage, but not more frequently than once a week. When ships are on short voyages, the quantity should be recorded weekly;1

.1 separated sludge (sludge resulting from purification of fuel and lubricating oils) and other residues, if applicable: —identity of tank(s)

—capacity of tank(s)

.....

m3-total quantity of retention

..... m3; .2 other residues (such as oils residues resulting from drainages, leakages, exhausted oil, etc., in the machinery spaces), if applicable due to tank arrangement in addition to .1:---identity of tank(s) —capacity of tank(s) m3 —total quantity of retention m3. 12. Methods of disposal of residue. State quantity of oil residues disposed of, the tank(s) emptied and the quantity of contents retained: .1 to reception facilities (identify port);2 .2 transferred to another (other) tank(s) (indicate tank(s) and the total content of tank(s)); .3 incinerated (indicate total time of operation); .4 other method (state which). (D) Non-automatic discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces 13. Quantity discharged or disposed of. 14. Time of discharge or disposal (start and stop). 15. Method of discharge or disposal: .1 through 100 ppm equipment (state position at start and end); .2 through 15 ppm equipment (state position at start and end); .3 to reception facilities (identify port);2 .4 transfer to slop tank or holding tank (indicate tank(s); state quantity transferred and the total quantity retained in tank(s)). (E) Automatic discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces 16. Time and position of ship at which the system has been put into automatic mode of operation for discharge overboard. 17. Time when the system has been put into automatic mode of operation for transfer of bilge water to holding tank (identify tank). 18. Time when the system has been put into manual operation. 2Ships' masters should obtain from the operator of the reception facilities, which include barges and tank trucks, a receipt or certificate detailing the quantity of tank washings, dirty ballast, residues or oily mixtures transferred, together with the time and date of the transfer. This receipt or certificate, if attached to the Oil Record Book, may aid the master of the ship in proving that his ship was not involved in an alleged pollution incident. The receipt or certificate should be kept together with the Oil Record Book. 19. Method of discharge overboard:, .1 through 100 ppm equipment;

.2 through 15 ppm equipment.

(F) Condition of oil discharge monitoring and control system

20. Time of system failure.

21. Time when system has been made operational.

22. Reasons for failure.

(G) Accidental or other exceptional discharges of oil	
23. Time of occurrence.	
24. Place or position of ship at time of occurrence.	
25. Approximate quantity and type of oil.	
26. Circumstances of discharge or escape, the reasons therefor and	
general remarks.	
(H) Bunkering of fuel or bulk lubricating oil	
27. Bunkering:	
.1 Place of bunkering.	
.2 Time of bunkering.	
.3 Type and quantity of fuel oil and identity of tank(s) (state	
quantity added and total content of tank(s)).	
4 Type and quantity of lubricating oil and identity of tank(s)	
(state quantity added and total content of tank(s)).	
(I) Additional operational procedures and general remarks	
Name of ship	
1	Distinctive
number or letters	
CARGO/BALLAST OPERATIONS (OIL TANKERS) */	
MACHINERY SPACE OPERATIONS (ALL SHIPS)*	
DateCode (letter)Item (number)Record of operations/signature of officer	
in charge	
Signature of master	
*Delete as appropriate	
OIL RECORD BOOK	
PART II	
Cargo/ballast operations	
(Oil tankers)	
(On tankers)	
Name of shin	
Traine of sinp	ח
istinctive	D
number or letters	
number of letters	
Grass tannage	
Gross tonnage	
Period from	
to	
Note: Every oil tanker of 150 tons gross tonnage and above shall	
he provided with Oil Decord Rook Dart II to record relevant	
be provided with Off Record Book Fart if to record relevant	
O'l Deserved Deset Deset Lite second enforcement and be provided with	
Oil Record Book Part I to record relevant machinery space	
operations.	
Name of ship	D
	Distincti
ve	
number or letters	
PLAN VIEW OF CARGO AND SLOP TANKS	
(to be completed on board)	

INTRODUCTION

The following pages of this section show a comprehensive list of items of cargo and ballast operations which are, when appropriate, to be recorded in the Oil Record book in accordance with regulation 20 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78). The items have been grouped into operational sections, each of which is denoted by a letter code. When making entries in the Oil Record Book, the date, operational code and item number shall be inserted in the appropriate columns and the required particulars shall be recorded chronologically in the blank spaces.

Each completed operation shall be signed for and dated by the officer or officers in charge. Each completed page shall be signed by the master of the ship. In respect of the oil tankers engaged in specific trades in accordance with regulation 13C of Annex I of MARPOL 73/78, appropriate entry in the Oil Record Book shall be endorsed by the competent port State authority.*

The Oil Record Book contains many references to oil quantity. The limited accuracy of tank measurement devices, temperature variations and clingage will affect the accuracy of these readings. The entries in the Oil Record Book should be considered accordingly.

*This sentence should only be inserted for the Oil Record Book of a tanker engaged in a specific trade.

LIST OF ITEMS TO BE RECORDED

- (A) Loading of oil cargo
- 1. Place of loading.
- 2. Type of oil loaded and identity of tank(s).

3. Total quantity of oil loaded (state quantity added and the total content of tank(s)).

(B) Internal transfer of oil cargo during voyage

4. Identity of tank(s):

.1 from:

.2 to: (state quantity transferred and total quantity of tank(s)).

5. Was (were) the tank(s) in 4.1 emptied? (If not, state quantity retained.)

(C) Unloading of oil cargo

- 6. Place of unloading.
- 7. Identity of tank(s) unloaded.

8. Was (were) the tank(s) emptied? (If not, state quantity retained.)

(D) Crude oil washing (COW tankers only)

(To be completed for each tank being crude oil washed).

9. Port where crude oil washing was carried out or ship's position

if carried out between two discharge ports.

10. Identity of tank(s) washed.1

11. Number of machines in use.

- 12. Time of start of washing.
- 13. Washing pattern employed.2
- 14. Washing line pressure.
- 15. Time washing was completed or stopped.

16. State method of establishing that tank(s) was (were) dry.

17. Remarks.3

1When an individual tank has more machines than can be operated simultaneously, as described in the Operations and Equipment Manual, then the section being crude oil washed should be identified, e.g. No. 2 centre, forward section.

2In accordance with the Operations and Equipment Manual, enter whether single-stage or multi-stage method of washing is employed. If multi-stage method is used, give the vertical arc covered by the machines and the number of times that arc is covered for that particular stage of the programme.

3If the programmes given in the Operations and Equipment Manual are not followed, then the reasons must be given under Remarks.

(E) Ballasting of cargo tanks

18. Position of ship at start and end of ballasting.

19. Ballasting process:

.1identity of tank(s) ballasted;

.2 time of start and end;

.3 quantity of ballast received. Indicate total quantity of ballast

for each tank involved in the operation.

(F) Ballasting of dedicated clean ballast tanks (CBT tankers only)

20. Identity of tank(s) ballasted.

21. Position of ship when water intended for flushing, or port

ballast was taken to dedicated clean ballast tank(s).

22. Position of ship when pump(s) and lines were flushed to slop tank.

23. Quantity of the oily water which, after line flushing, is transferred to the slop tank(s) or cargo tank(s) in which slop is preliminarily stored (identify tank(s)). State the total quantity.24. Position of ship when additional ballast water was taken to dedicated clean ballast tank(s).

25. Time and position of ship when valves separating the dedicated clean ballast tanks from cargo and stripping lines were closed.

26. Quantity of clean ballast taken on board.

(G) Cleaning of cargo tanks

27. Identity of tank(s) cleaned.

28. Port or ship's position.

29. Duration of cleaning.

30. Method of cleaning.4.

31. Tank washings transferred to:

.1 reception facilities (state port and quantity)5;

.2 slop tank(s) or cargo tank(s) designated as slop tank(s)

(identify tank(s); state quantity transferred and total quantity).

4Hand-hosing, machine washing and/or chemical cleaning. Where

chemically cleaned, the chemical concerned and amount used should be stated.

5Ships' masters should obtain from the operator of the reception facilities, which include barges and tank trucks, a receipt or certificate detailing the quantity of tank washings, dirty ballast, residues or oily mixtures transferred, together with the time and date of the transfer. This receipt or certificate, if attached to the Oil Record Book, may aid the master of the ship in proving that his ship was not involved in an alleged pollution incident. The receipt or certificate should be kept together with the Oil Record Book.

(H) Discharge of dirty ballast

32. Identity of tank(s).

33. Position of ship at start of discharge into the sea.

34. Position of ship on completion of discharge into the sea.

35. Quantity discharged into the sea.

36. Ship's speed(s) during discharge.

37. Was the discharge monitoring and control system in operation during the discharge?

during the discharge?

38. Was a regular check kept on the effluent and the surface of

the water in the locality of the discharge?

39. Quantity of oily water transferred to slop tank(s) (identify slop tank(s). State total quantity).

40. Discharged to shore reception facilities (identify port and quantity involved).5

(I) Discharge of water from slop tanks into the sea

41. Identity of slop tanks.

42. Time of settling from last entry of residues, or

43. Time of settling from last discharge.

44. Time and position of ship at start of discharge.

45. Ullage of total contents at start of discharge.

46. Ullage of oil/water interface at start of discharge.

47. Bulk quantity discharged and rate of discharge.

48. Final quantity discharged and rate of discharge.

49. Time and position of ship on completion of discharge.

50. Was the discharge monitoring and control system in operation during the discharge?

51. Ullage of oil/water interface on completion of discharge.

52. Ship's speed(s) during discharge.

53. Was a regular check kept on the effluent and the surface of the water in the locality of the discharge?

54. Confirm that all applicable valves in the ship's piping system have been closed on completion of discharge from the slop tanks. 5Ships' masters should obtain from the operator of the reception facilities, which include barges and tank trucks, a receipt or certificate detailing the quantity of tank washings, dirty ballast, residues or oily mixtures transferred, together with the time and date of the transfer. This receipt or certificate, if attached to the Oil Record Book, may aid the master of the ship in proving that his ship was not involved in an alleged pollution incident. The receipt or certificate should be kept together with the Oil

Record Book.

(J) Disposal of residues and oily mixtures not otherwise dealt with 55. Identity of tank(s).

56. Quantity disposed of from each tank. (State the quantity retained.)

57. Method of disposal:

.1 to reception facilities (identify port and quantity involved);5

.2 mixed with cargo (state quantity);

.3 transferred to (an)other tank(s) (identify tank(s); state quantity transferred and total quantity in tank(s));

.4 other method (state which); state quantity disposed of.

(K) Discharge of clean ballast contained in cargo tanks

58. Position of ship at start of discharge of clean ballast.

59. Identity of tank(s) discharged.

60. Was (were) the tank(s) empty on completion?

61. Position of ship on completion if different from 58.

62. Was a regular check kept on the effluent and the surface of the water in the locality of the discharge?

(L) Discharge of ballast from dedicated clean ballast tanks (CBT tankers only)

63. Identity of tank(s) discharged.

64. Time and position of ship at start of discharge of clean ballast into the sea.

65. Time and position of ship on completion of discharge into the sea.

66. Quantity discharged:

.1 into the sea; or

.2 to reception facility (identify port).

67. Was there any indication of oil contamination of the ballast water before or during discharge into the sea?

68. Was the discharge monitored by an oil content meter?

69. Time and position of ship when valves separating dedicated clean ballast tanks from the cargo and stripping lines were closed on completion of deballasting.

5Ship's masters should obtain from the operator of the reception facilities, which include barges and tank trucks, a receipt or certificate detailing the quantity of tank washings, dirty ballast, residues or oily mixtures transferred, together with the time and date of the transfer. This receipt or certificate, if attached to the Oil Record Book, may aid the master of the ship in proving that his ship was not involved in an alleged pollution incident. The receipt or certificate should be kept together with the Oil

Record Book.

(M) Condition of oil discharge monitoring and control system 70. Time of system failure.

71. Time when system has been made operational.

- 72. Reasons for failure.
- (N) Accidental or other exceptional discharges of oil
- 73. Time of occurrence.

74. Port or ship's position at time of occurrence.

75. Approximate quantity and type of oil.

76. Circumstances of discharge or escape, the reasons therefor and general remarks.

(O) Additional operational procedures and general remarks

TANKERS ENGAGED IN SPECIFIC TRADES.

- (P) Loading of ballast water
- 77. Identity of tank(s) ballasted.
- 78. Position of ship when ballasted.
- 79. Total quantity of ballast loaded in cubic metres.

80. Remarks.

- (Q) Re-allocation of ballast water within the ship
- 81. Reasons for re-allocation.
- (R) Ballast water discharge to reception facility
- 82. Port(s) where ballast water was discharged.
- 83. Name or designation of reception facility.
- 84. Total quantity of ballast water discharged in cubic metres.
- 85. Date, signature and stamp of port authority official.

Name of ship

.....Distincti

number or letters

CARGO/BALLAST OPERATIONS (OIL TANKERS)*/ MACHINERY SPACE OPERATIONS (ALL SHIPS)*

DateCode (letter)Item (number)Record of operations/signature of officer in charge *Delete as appropriate.

Signature of master

.....

GIVEN under my Official Seal, this 18th day of February, 1994.

DAVID ANDREWS, Minister for the Marine.

EXPLANATORY NOTE.

These Regulations give effect to Annex I of the International Convention for the Prevention of Pollution from Ships, adopted by the International Maritime Organisation on 2 November, 1973 and as amended by its Protocol adopted by the International Maritime Organisation on 17 February, 1978 and as further amended under resolutions adopted by the Marine Environment Protection Committee (MEPC) of the International Maritime Organisation.

The Regulations apply to all Irish ships wherever they may be and to all other ships when they are in the territorial waters of the State.

The Regulations prohibit and control discharge into the sea of oil and oily mixtures. The Regulations require ships to follow specified procedures when washing cargo tanks. Ballasting arrangements and the discharge of ballast water are also controlled. The Regulations also provide for adequate facilities at ports and terminals for the reception of oil and oily mixtures.

Ships are required to be surveyed for the purposes of the Regulations and to carry an International Pollution Prevention Certificate. Ships are also required to carry an Operations and Equipment Manual, an Oil Record Book and a shipboard oil pollution

emergency plan approved by the Minister. Section 29 of the Sea Pollution Act, 1991 provides for penalties for breaches of these Regulations.