MARPOL 73/78

Contents

Annex I of MARPOL 73/78 (including amendments*)'

* As of the publication of this 1997 Consolidated Edition, the 1990 Amendments on the harmonized system of surveys and certification had not entered into force. For information Purposes only, refer to resolution MEPC.39(29) on the introduction of the harmonized system of survey and certification of Annexes I and 11 of MARPOL 73/78 adopted on 16 March 1990 by the Marine Environment Protection Committee, as set out in the Additional Information section, page 393, of the present publication.

***Regulations for the Prevention of Pollution by* Oil**

Chapter I - General

Regulation 1
Definitions

For the purposes of this Annex:

(1) ***Oil*** means petroleum in any form including crude oil, fuel oil, sludge, oil refuse and refined products (other than petrochemicals which are subject to the provisions of Annex II of the present Convention) and, without limiting the generality of the foregoing, includes the substances listed in appendix I to this Annex.

SEE INTERPRETATION 1A.0

(2) ***Oily mixture*** means a mixture with any oil content.
(3) ***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.
(4) ***Oil tanker*** means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers and any "chemical tanker" as defined in Annex II of the present Convention when it **is** carrying a cargo or part cargo of oil in bulk.

SEE INTERPRETATIONS 1.0 AND 6.1

(5) ***Combination carrier*** means a ship designed to carry either oil or solid cargoes in bulk.
(6) ***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.

SEE INTERPRETATIONS 1.1 AND 1.2

(7) ***Existing ship*** means a ship which is not a new ship.
(8) (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 Administration 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 present Convention not applicable to it as an existing ship.

SEE INTERPRETATION 1.3

(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 this Annex shall not be deemed to constitute a major conversion for the purposes of this Annex.

(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 this Annex shall not be deemed to constitute a major conversion for the purpose of this Annex.

(9) ***Nearest land***. The term "from the nearest land" means from the baseline from which the territorial sea of the territory in question is established in accordance with international law, except that, for the purposes of the present Convention "from the nearest land" off the northeastern coast of Australia shall mean from a line drawn from a point on the coast of Australia in

latitude 11º 00' S, longitude 142º08'E
to a point in latitude 10º35' S, longitude 141º55' E,
thence to a point latitude 10º00' S, longitude 142º00' E,
thence to a point latitude 9º10' S, longitude 143º52' E,
thence to a point latitude 9º00' S, longitude 144º30' E,
thence to a point latitude 13º00' S, longitude 144º00' E,
thence to a point latitude 15º00' S, longitude 146º00' E,
thence to a point latitude 18º00' S, longitude 147º00'E,
thence to a point latitude 21º00' S, longitude 153º00' E,
thence to a point on the coast of Australia in latitude 24º42' S, longitude 153º15' E.

(10) ***Special area*** means a sea area where for recognized 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. Special areas shall include those listed in regulation 10 of this Annex.

(11) ***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.

(12) ***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.

(13) ***Wing tank*** means any tank adjacent to the side shell plating.

(14) ***Centre tank*** means any tank inboard of a longitudinal bulkhead.

(15) ***Slop tank*** means a tank specifically designated for the collection of tank drainings, tank washings and other oily mixtures.

(16) ***Clean ballast*** means the ballast in a tank which since oil was last carried therein, has been so cleaned that effluent therefrom if it were discharged from a ship which is stationary into clean calm water on a clear day would not produce visible traces of oil on the surface of the water or on adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. If the ballast is discharged through an oil discharge monitoring and control system approved by the Administration, 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.

(17) ***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 substances as variously defined in the Annexes of the present Convention.

SEE INTERPRETATION 1.4

(18) ***Length (L)*** means 96 % of the total length on a waterline at 85% 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.

(19) ***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.

(20) ***Amidships*** is at the middle of the length (L).

(21) ***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.

(22) ***Deadweight*** **(DW)** means the difference in metric tons between the displacement of a ship in water of a specify gravity of 1.025 at the load waterline corresponding to the assigned summer freeboard and the lightweight of the ship.

(23) ***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.

(24) ***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.

(25) ***Volumes and areas*** in a ship shall be calculated in all cases to moulded lines.

(26) Notwithstanding the provisions of paragraph (6) of this regulation, for the purposes of regulations 13, 13B, 13E and 18(4) of this Annex, ***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 in paragraph (6) of this regulation shall apply for the purposes of regulation 13(l) of this Annex.

SEE INTERPRETATIONS 1.1 AND 1.2

(27) Notwithstanding the provisions of paragraph (7) of this regulation, for the purposes of regulations 13, 13A, 13B, 43C, 13D, 18(5) and 18(6)(c) of this Annex, ***existing oil tanker*** means an oil tanker which is not a new oil tanker as defined in paragraph (26) of this regulation.

(28) ***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.

(29) ***Crude oil tanker*** means an oil tanker engaged in the trade of carrying crude oil.

(30) ***Product carrier*** means an oil tanker engaged in the trade of carrying oil other than crude oil.

Regulation 2
Application

(1) Unless expressly provided otherwise, the provisions of this Annex shall apply to all ships.

(2) In ships other than oil tankers fitted with cargo spaces which are constructed and utilized to carry oil in bulk of an aggregate capacity of 200 cubic metres or more, the requirements of regulations 9, 10, 14, 15(l), (2) and (3), 18, 20 and 24(4) of this Annex for oil tankers shall also apply to the construction and operation of those spaces, except that where such aggregate capacity is less than 1,000 cubic metres the requirements of regulation 15(4) of this Annex may apply in lieu of regulation 15(l), (2) and (3).

(3) Where a cargo subject to the provisions of Annex II of the present Convention is carried in a cargo space of an oil tanker, the appropriate requirements of Annex II of the present Convention shall also apply.

(4) (a) Any hydrofoil, air-cushion vehicle and other new type of vessel (near-surface craft, submarine craft, etc.) whose constructional features are such as to render the application of any of the provisions of chapters II and III of this Annex relating to construction and equipment unreasonable or impracticable may be exempted by the Administration from such provisions, provided that the construction and equipment of that ship provides equivalent protection against pollution by oil, having regard to the service for which it is intended.

(b) Particulars of any such exemption granted by the Administration shall be indicated in the Certificate referred to in regulation 5 of this Annex.

(c) The Administration which allows any such exemption shall, as soon as possible, but not more than 90 days thereafter, communicate to the Organization particulars of same and the reasons therefor, which the Organization shall circulate to the Parties to the Convention for their information and appropriate action, if any.

Regulation 3
Equivalents

SEE INTERPRETATION 1.5

(1) The Administration may allow any fitting, material, appliance or apparatus to be fitted in a ship as an alternative to that required by this Annex if such fitting, material, appliance or apparatus is at least as effective as that required by this Annex. This authority of the Administration shall not extend to substitution of operational methods to effect the control of discharge of oil as equivalent to those design and construction features which are prescribed by regulations in this Annex.

(2) The Administration which allows a fitting, material, appliance or apparatus, as an alternative to that required by this Annex shall communicate to the Organization for circulation to the Parties to the Convention particulars thereof, for their information and appropriate action, if any.

Regulation 4
Surveys and inspections

(1) Every oil tanker of 150 tons gross tonnage and above, and every other ship of 400 tons gross tonnage and above shall be subject to the surveys specified below:

(a) An initial survey before the ship is put in service or before the Certificate required under regulation 5 of this Annex 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 this Annex. This survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of this Annex.

(b) Periodical surveys at intervals specified by the Administration but not exceeding five years, which shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the requirements of this Annex.

(c) A minimum of one intermediate survey during the period of validity of the Certificate which 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 this Annex and are in good working order. In cases where only one such intermediate survey is earned out in any one Certificate validity period, it shall be held not before six months prior to, nor later than six months after the half-way date of the Certificate's period of validity. Such intermediate surveys shall be endorsed on the Certificate issued under regulation 5 of this Annex.

SEE INTERPRETATION 1A.1

(2) The Administration shall establish appropriate measures for ships which are not subject to the provisions of paragraph (1) of this regulation in order to ensure that the applicable provisions of this Annex are complied with.

(3) (a) Surveys of ships as regards the enforcement of the provisions of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it.

(b) The Administration shall institute arrangements for unscheduled inspections to be carried out during the period of validity of the Certificate. Such inspections shall ensure that the ship and its equipment remain in all respects satisfactory for the service for which the ship is intended. These inspections may be carried out by their own inspection services, or by nominated surveyors or by recognized organizations, or by other Parties upon request of the Administration. Where the Administration, under the provisions of paragraph (1) of this regulation, establishes mandatory annual surveys, the above unscheduled inspections shall not be obligatory.

SEE INTERPRETATION 1A.1

(c) An Administration nominating surveyors or recognizing organizations to conduct surveys and inspections as set forth in subparagraphs (a) and (b) of this paragraph, shall as a minimum empower any nominated surveyor or recognized organization
to:
(i) require repairs to a ship; and
(ii) carry out surveys and inspections if requested by the appropriate authorities of a port State.

The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations, for circulation to Parties to the present Protocol for the information of their officers.

(d) When a nominated surveyor or recognized organization determines that the condition of the ship or its equipment does not correspond substantially with the particulars of the Certificate or is such that the ship is not fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment, such surveyor or organization shall immediately ensure that corrective action is taken and shall in due course notify the Administration. If such corrective action is not taken the Certificate should be withdrawn and the Administration shall be notified immediately; and if the ship is in a port of another Party, the appropriate authorities of the port State shall also be notified immediately. When an officer of the Administration, a nominated surveyor or recognized organization has notified the appropriate authorities of the port State, the Government of the port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this regulation. When applicable, the Government of the port State concerned shall take such steps as will ensure that the ship shall not sail until it can proceed to sea or leave the port for the purpose of proceeding to the nearest appropriate repair yard available without presenting an unreasonable threat of harm to the marine environment.

(e) In every case, the Administration concerned shall fully guarantee the completeness and efficiency of the survey and inspection and shall undertake to ensure the necessary arrangements to satisfy this obligation.

(4) (a) The condition of the ship and its equipment shall be maintained to conform with the provisions of the present Convention to ensure that the ship in all respects will remain fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment.

(b) After any survey of the ship under paragraph (1) of this regulation has been completed, no change shall be made in the structure, equipment, systems, fittings, arrangements or material covered by the survey, without the sanction of the Administration, except the direct replacement of such equipment and fittings.

(c) Whenever an accident occurs to a ship or a defect is discovered which substantially affects the integrity of the ship or the efficiency or completeness of its equipment covered by this Annex the master or owner of the ship shall report at the earliest opportunity to the Administration, the recognized organization or the nominated surveyor responsible for issuing the relevant certificate, who shall cause investigations to be initiated to determine whether a survey as required by paragraph (1) of this regulation is necessary. If the ship is in a port of another Party, the master or owner shall also report immediately to the appropriate authorities of the port State and the nominated surveyor or recognized organization shall ascertain that such report has been made.

Regulation 5
Issue of certificate

SEE INTERPRETATIONS 2.0, 2.1, 2.2

An International Oil Pollution Prevention Certificate shall be issued, after survey in accordance with the provisions of regulation 4 of this Annex, 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 to the Convention. In the case of existing ships this requirement shall apply 12 months after the date of entry into force of the present Convention.

(2) Such certificate shall be issued either by the Administration or by any persons . or organization duly authorized by it. In every case the Administration assumes full responsibility for the certificate.

Regulation 6
Issue of a certificate by another Government

(1) The Government of a Party to the Convention may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the provisions of this Annex are complied with, shall issue or authorize the issue of an International Oil Pollution Prevention Certificate to the ship in accordance with this Annex.

(2) A copy of the certificate and a copy of the survey report shall be transmitted as soon as possible to the requesting Administration.

(3) A certificate so issued shall contain a statement to the effect that it has been issued at the request of the Administration and it shall have the same force and receive the same recognition as the certificate issued under regulation 5 of this Annex.

(4) No International Oil Pollution Prevention Certificate shall be issued to a ship which is entitled to fly the flag of a State which is not a Party.

Regulation 7
Form of certificate

SEE INTERPRETATION 2.4A

The International Oil Pollution Prevention Certificate shall be drawn up in an official language of the issuing country in the form corresponding to the model given in appendix 11 to this Annex. If the language used is neither English nor French, the text shall include a translation into one of these languages.

Regulation 8
Duration of certificate

SEE INTERPRETATION 2.5

(1) An International Oil Pollution Prevention Certificate shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue, provided that in the case of an oil tanker operating with dedicated clean ballast tanks for a limited period specified in regulation 13(9) of this Annex, the period of validity of the certificate shall not exceed such specified period.

(2) A certificate shall cease to be valid if significant alterations have taken place in the construction, equipment, systems, fittings, arrangements or material required without the sanction of the Administration, except the direct replacement of such equipment or fittings, or if intermediate surveys as specified by the Administration under regulation 4(l)(c) of this Annex are not carried out.

(3) A certificate issued to a ship shall also cease to be valid upon transfer of the ship to the flag of another State. A new certificate shall only be issued when the Government issuing the new certificate is fully satisfied that the ship is in full compliance with the requirements of regulation 4(4)(a) and (b) of this Annex. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Government of the Party whose flag the ship was formerly entitled to fly shall transmit as soon as possible to the Administration a copy of the certificate carried by the ship before the transfer and, if available, a copy of the relevant survey report.

Regulation 8A
*Port State control on operational requirements**
*Refer to the procedures for port State control adopted by the Organization by resolution A.787(19); see IMO sales publication IMO-650E.

(1) A ship when in a Port or an offshore terminal of another Party is subject to inspection by officers duly authorized by such Party concerning operational requirements under this Annex, where there are clear

grounds for believing that the master or crew are not familiar with essential shipboard procedures relating to the prevention of pollution by oil.

(2) In the circumstances given in paragraph (1) of this regulation, the Party shall take such steps as will ensure that the ship shall not sail until the situation has been brought to order in accordance with the requirements of this Annex.

(3) Procedures relating to the port State control prescribed in article 5 of the present Convention shall apply to this regulation.

(4) Nothing in this regulation shall be construed to limit the rights and obligations of a Party carrying out control over operational requirements specifically provided for in the present Convention.

Chapter II – Requirements for control of operational pollution

Regulation 9
Control of discharge of oil

(1) Subject to the provisions of regulations 10 and 11 of this Annex and paragraph (2) of this regulation, any discharge into the sea of oil or oily mixtures from ships to which this Annex applies shall be prohibited except when all the following conditions are satisfied:

(a) for an oil tanker, except as provided for in subparagraph (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

SEE INTERPRETATION 3.2

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

(b) from a ship of 400 tons gross tonnage and above other than an oil tanker and from machinery space bilges excluding cargo pump-room bilges of an oil tanker unless mixed with oil cargo
residue:

(i) the ship is not within a special area;
(ii) the ship is 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 this Annex.

SEE INTERPRETATION 3.1

(2) In the case of a ship of less than 400 tons gross tonnage other than an oil tanker whilst outside the special area, the Administration shall ensure that it is equipped as far as practicable and reasonable with installations to ensure the storage of oil residues 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) Whenever visible traces of oil are observed on or below the surface of the water in the immediate vicinity of a ship or its wake, Governments of Parties to the Convention should, to the extent they are reasonably able to do so, promptly investigate the facts bearing on the issue of whether there has been a violation of the provisions of this regulation or regulation 10 of this Annex. The investigation should include, in particular, the wind and sea conditions, the track and speed of the ship, other possible sources of the visible traces in the vicinity, and any relevant oil discharge records.

(4) The provisions of paragraph (1) of this regulation shall not apply to the discharge of clean or segregated ballast or 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.

(5) No discharge into the sea shall contain chemicals or other substances in quantities or concentrations which are hazardous to the marine environment or chemicals or other substances introduced for the purpose of circumventing the conditions of discharge specified in this regulation.

(6) The oil residues which cannot be discharged into the sea in compliance with paragraphs (1), (2) and (4) of this regulation shall be retained on board or discharged to reception facilities.

(7) In the case of a ship, referred to in regulation 16(6) of this Annex, not fitted with equipment as required by regulation 16(l) or 16(2) of this Annex, 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 shall be prohibited except when all the following conditions are satisfied:

(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 *e 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 Administration, taking into account the specification recommended by the Organization.*

- Refer to the Guidelines and specifications for pollution prevention equipment for machinery space bilges of ships adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.60(33); **see** IMO sales publication IMO-646E.

Regulation 10

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

(1) For the purposes of this Annex, 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 area 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 41ºN parallel and bounded to the west by the Straits of Gibraltar at the meridian of 5º36' W.

(b) ***The Baltic Sea area*** means the Baltic Sea proper with the Gulf of Bothnia, the Gulf of FirAand and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57º 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 41º N.

(d) The ***Red Sea area*** means the Red Sea proper including the Gulfs of Suez and Aqaba bounded at the south by the thumb line between Ras si Ane (12º 28.5' N, 43º 19.6'E) and Husn Murad (12º40.4' N, 43º 30.2' E).

(e) The ***Gulfs area*** means the sea area located north-west of the thumb line between Ras al Hadd (22º30'N, 59º 48' E) and Ras al Fasteh (25º04' N, 61º 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 thumb line between Ras si Ane (12º 28.5' N, 43º19.6' E) and Husn Murad (12º 40.4' N, 43º30.2' E) and to the east by the thumb line between Ras Asir (11º 50' N, 51º16.9' E) and the Ras Fartak (15º35' N, 52º 13.8' E).

(g) ***The Antarctic area*** means the sea area south of latitude 60º S.

(2) Subject to the provisions of regulation 11 of this Annex:

(a) Any discharge into the sea of oil or oily mixture from any oil tanker and any ship of 400 tons gross tonnage and above other than an oil tanker shall be 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 shall be prohibited.

(b) Except as provided for in respect of the Antarctic 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, shall be 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 paragraph (2) 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(5) of this Annex; 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.

SEE INTERPRETATION 3.4

(4) (a) No discharge into the sea shall contain chemicals or other substances in quantities or concentrations which are hazardous to the marine environment or chemicals or other substances introduced for the purpose of circumventing the conditions of discharge specified in this 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 9 of this Annex.

(6) Whenever visible traces of oil are observed on or below the surface of the water in the immediate vicinity of a ship or its wake, the Governments of Parties to the Convention should, to the extent they are reasonably able to do so, promptly investigate the facts bearing on the issue of whether there has been a violation of the provisions of this regulation or regulation 9 of this Annex. The investigation should include, in particular, the wind and sea conditions, the track and speed of the ship, other possible sources of the visible traces in the vicinity, and any relevant oil discharge records.

(7) Reception facilities within special areas:

(a) Mediterranean Sea, Black Sea and Baltic Sea areas:

(i) The Government of each Party to the Convention the coastline of which borders on any given special area undertakes to ensure that not later than 1 January 1977 all oil loading terminals and repair ports within the special area are provided with facilities adequate for the reception and treatment of all the dirty ballast and tank washing water from oil tankers. In addition all ports within the special area shall be provided with adequate reception facilities for other residues and oily mixtures from all ships. Such facilities shall have adequate capacity to meet the needs of the ships using them without causing undue delay.

(ii) The Government of each Party having under its 'jurisdiction entrances to seawater courses with low depth contour which might require a reduction of draught by the discharge of ballast undertakes to ensure the provision of the facilities referred to in subparagraph (a)(i) of this paragraph but with the proviso that ships required to discharge slops or dirty ballast could be subject to some delay.

(iii) During the period between the entry into force of the present Convention (if earlier than 1 January 1977) and I January 1977 ships while navigating in the special areas shall comply with the requirements of regulation 9 of this Annex. However, the Governments of Parties the coastlines of which border any of the special areas under this subparagraph may establish a date earlier than I January 1977, but after the date of entry in force of the present Convention, from which the requirements of this regulation in respect of the special areas in question shall take effect:

(1) if all the reception facilities required have been provided by the date so established; and

(2) provided that the Parties concerned notify the Organization of the date so established at least six months in advance, for circulation to other Parties.

(iv) After 1 January 1977, or the date established in accordance with subparagraph (a)(iii) of this paragraph if earlier, each Party shall notify the Organization for transmission to the Contracting Governments concerned of all cases where the facilities are alleged to be inadequate.

(b) Red Sea area, Gulfs area and Gulf of Aden area:

(i) The Government of each Party the coastline of which borders on the special areas undertakes to ensure that as soon as possible all oil loading terminals and repair ports within these special areas are provided with facilities adequate for the reception and treatment of all the dirty ballast and tank washing water from tankers. In addition all ports within the special area shall be provided with adequate reception facilities for other residues and oily mixtures from all ships. Such facilities shall have adequate capacity to meet the needs of the ships using them without causing undue delay.

(ii) The Government of each Party having under its jurisdiction entrances to seawater courses with low depth contour which might require a reduction of draught by the discharge of ballast shall undertake to ensure the provision of the facilities referred to in subparagraph (b)(i) of this paragraph but with the proviso that ships required to discharge slops or dirty ballast could be subject to some delay.

(iii) Each Party concerned shall notify the Organization of the measures taken pursuant to provisions of subparagraph (b)(i) and (ii) of this paragraph. Upon receipt of sufficient notifications the Organization shall establish a date from which the requirements of this regulation in respect of the area in question shall take effect. The Organization shall notify all Parties of the date so established no less than twelve months in advance of that date.

(iv) During the period between the entry into force of the present Convention and the date so established, ships while navigating in the special area shall comply with the requirements of regulation 9 of this Annex.

(v) After such date oil tankers loading in ports in these special areas where such facilities are not yet available shall also fully comply with the requirements of this regulation. However, oil tankers entering these special areas for the purpose of loading shall make every effort to enter the area with only clean ballast on board.

(vi) After the date on which the requirements for the special area in question take effect, each Party shall notify the Organization for transmission to the Parties concerned of all cases where the facilities are alleged to be inadequate.

(vii) At least the reception facilities as prescribed in regulation 12 of this Annex shall be provided by 1 January 1977 or one year after the date of entry into force of the present Convention, whichever occurs later.

(8) Notwithstanding paragraph (7) of this regulation, the following rules apply to the Antarctic area:

(a) The Government of each Party to the Convention at whose ports ships depart *en route* to or arrive from the Antarctic area undertakes to ensure that as soon as practicable adequate facilities are provided for the reception of all sludge, dirty ballast, tank washing water, and other oily residues and mixtures from all ships, without causing undue delay, and according to the needs of the ships using them.

(b) The Government of each Party to the Convention shall ensure that all ships entitled to fly its flag, before entering the Antarctic area, are fitted with a tank or tanks of sufficient capacity on board for the retention of all sludge, dirty ballast, tank washing water and other oily residues and mixtures while operating in the area and have concluded arrangements to discharge such oily residues at a reception facility after leaving the area.

Regulation 11
Exceptions

Regulations 9 and 10 of this Annex shall not apply to:

(a) the discharge into the sea of oil or oily mixture necessary for the purpose of securing the safety of a ship or saving life at sea; or

(b) the discharge into the sea of oil or oily mixture resulting from damage to a ship or its equipment:

(i) provided that all reasonable precautions have been taken after the occurrence of the damage or discovery of the discharge for the purpose of preventing or minimizing the discharge; and

(ii) except if the owner or the master acted either with intent to cause damage, or recklessly and with knowledge that damage would probably result; or

(c) the discharge into the sea of substances containing oil, approved by the Administration, when being used for the purpose of combating specific pollution incidents in order to minimize the damage from pollution. Any such discharge shall be subject to the approval of any Government in whose jurisdiction it is contemplated the discharge will occur.

Regulation 12
Reception facilities

(1) Subject to the provisions of regulation 10 of this Annex, the Government of each Party undertakes to ensure the provision at oil loading terminals, repair ports, and in other ports in which ships have oily residues to discharge, of 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 the sludge tank(s) required by regulation 17 of this Annex;

(e) all ports in respect of oily bilge waters and other residues, which cannot be discharged in accordance with regulation 9 of this Annex; and

(f) all loading ports for bulk cargoes in respect of oil residues from combination carriers which cannot be discharged in accordance with regulation 9 of this Annex.

SEE INTERPRETATION 3.5

(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 9 (1) (a) of this Annex 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 shall have sufficient reception facilities to receive oil and oily mixtures which cannot be discharged in accordance with the provisions of regulation 9(l)(a) of this Annex 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 this Annex 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 9 of this Annex.

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

(4) The reception facilities prescribed in paragraphs (2) and (3) of this regulation shall be made available no later than one year from the date of entry into force of the present Convention or by 1 January 1977, whichever occurs later.

(5) Each Party shall notify the Organization for transmission to the Parties concerned of all cases where the facilities provided under this regulation are alleged to be inadequate.

Regulation 13

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

SEE INTERPRETATIONS 2.1 AND 4.6

Subject to the provisions of regulations 13C and 13D of this Annex, oil tankers shall comply 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 paragraphs (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 for-ward 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 propellers).

(3) In no case shall ballast water 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; and

(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 Organization.

Such additional ballast water shall be processed and discharged in compliance with regulation 9 of this Annex and in accordance with the requirements of regulation 15 of this Annex and an entry shall be made in the Oil Record Book referred to in regulation 20 of this Annex.

SEE INTERPRETATION 4.1

(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 this Annex before departure from an oil unloading port or terminal.

SEE INTERPRETATION 4.2

(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 Administration.

SEE INTERPRETATION 4.3

(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. The Administration shall undertake to ensure that the system fully complies with the requirements of regulation 13B of this Annex 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 that regulation.

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 from the date of entry into force of the present Convention.

(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 this Annex unless the crude oil tanker is intended to carry crude oil which is not suitable for crude oil washing.

SEE INTERPRETATION 4.4

(9) Existing crude oil tankers referred to in paragraphs (7) or (8) of this regulation may, in lieu of being provided with segregated ballast tanks or operating with a cargo tank cleaning procedure using crude oil washing,

operate with dedicated clean ballast tanks in accordance with the provisions of regulation 13A of this Annex for the following period:

(a) or crude oil tankers of 70,000 tons deadweight and above, until two years after the date of entry into force of the present Convention; and

(b) for crude oil tankers of 40,000 tons deadweight and above but below 70,000 tons deadweight, until four years after the date of entry into force of the present Convention.

SEE INTERPRETATION 4.5

Existing product carriers of 40, 000 tons deadweight and above

(I0) From the date of entry into force of the present Convention, 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 this Annex.

SEE INTERPRETATION 4.5

An oil tanker qualified as a segregated ballast oil tanker

(11) Any oil tanker which is not required to be provided with segregated ballast tanks in accordance with paragraphs (1), (7) or (10) 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.

Regulation 13A

Requirements for oil tankers with dedicated clean ballast tanks

SEE INTERPRETATION 4.6

(1) An oil tanker operating with dedicated clean ballast tanks in accordance with the provisions of regulation 13(9) or (10) of this Annex, shall have adequate tank capacity, dedicated solely to the carriage of clean ballast as defined in regulation I(I6) of this Annex, to meet the requirements of regulation 13(2) and (3) of this Annex.

(2) The arrangements and operational procedures for dedicated clean ballast tanks shall comply with the requirements established by the Administration. Such requirements shall contain at least all the provisions of the Specifications for Oil Tankers with Dedicated Clean Ballast Tanks adopted by the International Conference on Tanker Safety and Pollution Prevention, 1978, in resolution 14 and as may be revised by the Organization.*

* Refer to the Revised specifications for oil tankers with dedicated clean ballast tanks adopted by the Organization by resolution A.495(XII); see IMO sales publication IMO-619E.

(3) An oil tanker operating with dedicated clean ballast tanks shall be equipped with an oil content meter, approved by the Administration on the basis of specifications recommended by the Organization, ** to enable supervision of the oil content in ballast water being discharged. The oil content meter shall be installed no later than at the first scheduled shipyard visit of the tanker following the entry into force of the present Convention. Until such time as the oil content meter is installed, it shall immediately before discharge of ballast be established by examination of the ballast water from dedicated tanks that no contamination with oil has taken place.

** For oil content meters installed on oil tankers built prior to 2 October 1986, refer to the Recommendation on international performance and test specifications for oily-water separating equipment and oil content meters adopted by the Organization by resolution A.393(X). For oil content meters as part of discharge monitoring and control systems installed OD oil tankers built on or after 2 October 1986, refer to the Guidelines and specifications for oil discharge monitoring and control systems for oil tankers adopted by the Organization by resolution A.586(14); see IMO sales publications IMO-608E and IMO-646E, respectively.

SEE INTERPRETATIONS 4.7 AND 4.8

(4) Every oil tanker operating with dedicated clean ballast tanks shall be provided with a Dedicated Clean Ballast Tank Operation Manual *** detailing the system and specifying operational procedures. Such a Manual shall be to the satisfaction of the Administration and shall contain all the information set out in the Specifications referred to in paragraph (2) of this regulation. If an alteration affecting the dedicated clean ballast tank system is made, the Operation Manual shall be revised accordingly.

*** See resolution A.495(XII) for the standard format of the Manual; see IMO sales publication IMO-619E.

Regulation 13B

Requirements for crude oil washing

SEE INTERPRETATIONS 4.6 AND 4.9

(1) Every crude oil washing system required to be provided in accordance with regulation 13(6) and (8) of this Annex shall comply with the requirements of this regulation.

(2) The crude oil washing installation and associated equipment and arrangements shall comply with the requirements established by the Administration. Such requirements shall contain at least all the provisions of 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 Organization.*

*Refer to the Revised specifications for the designs operation and control of crude oil washing systems adopted by the Organization by resolution A.446(XI) and amended by the Organization by resolution A.497(XII); see IMO sales publication IMO-617E.

(3) An inert gas system shall be provided in every cargo tank and slop tank in accordance with the appropriate regulations of chapter 11-2 of the International Convention for the Safety of Life at Sea, 1974, as modified and added to by the Protocol of 1978 relating to the international Convention for the Safety of Life at Sea, 1974 and as may be further amended.

(4) 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.

(5) Every oil tanker operating with crude oil washing systems shall be provided with an Operations and Equipment Manual ** detailing the system and equipment and specifying operational procedures. Such a Manual shall be to the satisfaction of the Administration and shall contain all the information set out in the Specifications referred to in paragraph (2) of this regulation. If an alteration affecting the crude oil washing system is made, the Operations and Equipment Manual shall be revised accordingly.

** Refer to the Standard format of the Crude Oil Washing Operation and Equipment Manual adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.3(XII); see IMO sales publication IMO-617E.

Regulation 13C

Existing tankers engaged in specific trades

SEE INTERPRETATION 4.6

Subject to the provisions of paragraph (2) of this regulation, regulation 13(7) to (10) of this Annex shall not apply to an existing oil tanker solely engaged in specific trades between:

(a) ports or terminals within a State Party to the present Convention; or

(b) ports or terminals of States Parties to the present Convention, where:

(i) the voyage is entirely within a special area as defined in regulation 10(l) of this Annex; or
(ii) the voyage is entirely within other limits designated by the Organization.

(2) The provisions of paragraph (1) of this regulation shall only apply 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 the exceptions provided for in regulation II of this Annex, 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 this Annex is endorsed by the competent port State authority;

(b) agreement has been reached between the Administration 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 the relevant provisions of this Annex at the ports or terminals referred to above, for the purpose of this regulation, is approved by the Governments of the States Parties to the present Convention within which such ports or terminals are situated; and

(d) the International Oil Pollution Prevention Certificate is endorsed to the effect that the oil tanker is solely engaged in such specific trade.

Regulation 13D

Existing oil tankers having special ballast arrangements

(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 this Annex 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 this Annex, provided that all of the following conditions are complied with:

(a) operational procedures and ballast arrangements are approved by the Administration;

(b) agreement is reached between the Administration and the Governments of the port States Parties to the present Convention concerned when the draught and trim requirements are achieved through an operational procedure; and

(c) the International Oil Pollution Prevention Certificate is endorsed to the effect that the oil tanker is operating with special ballast arrangements.

(2) in no case shall ballast water be 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 9 of this Annex and in accordance with the requirements of regulation 15 of this Annex, and entry shall be made in the Oil Record Book referred to in regulation 20 of this Annex.

(3) An Administration which has endorsed a Certificate in accordance with subparagraph (1)(c) of this regulation shall communicate to the Organization the particulars thereof for circulation to the Parties to the present Convention.

Regulation 13E
Protective location of segregated ballast spaces

SEE INTERPRETATIONS 2.1, 4.6, 4.10 AND 4.11

(1) 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 this Annex which are located within the cargo tank length, shall be 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 (L,) shall be so arranged as to comply with the following requirement:

$$\Sigma PA_c + \Sigma PA_s >= J[L_t(B + 2D)]$$

where: ΣPA_c = the side shell area in square metres for each segregated ballast tank or space other than an oil tank based on projected moulded dimensions,

ΣPA_s = the bottom shell area in square metres for each such tank or space based on projected moulded dimensions,

L_t = 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 1(21) of this Annex,

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 dead-weight 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.

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

(3) For tankers of 200,000 tons deadweight and above the value of J may be reduced as follows:

$$J_{\text{reduced}} = \left[J - \left(a - \frac{O_c + O_s}{4O_A} \right) \right]$$ 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.

O_C = as defined in regulation 23(l)(a) of this Annex,

O_S = as defined in regulation 23(l)(b) of this Annex,

O_A = the allowable oil outflow as required by regulation 24(2) of this Annex.

(4) In the determination of PA_C and PA_S 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 centreline. Where a lesser width is provided the wing tank or space shall not be taken into account when calculating the protecting area PA_C ; 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 PA_S .

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.

Regulation 13F

Prevention of oil pollution in the event of collision or stranding

SEE INTERPRETATION 4.6

(1) This regulation shall apply to oil tankers of 600 tons deadweight and above:

(a) or 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.

SEE INTERPRETATION 1.2

(2) Every oil tanker of 5,000 tons deadweight and above shall:

(a) in lieu of regulation 13E, as applicable, comply with the requirements of paragraph (3) unless it is subject to the provisions of paragraphs (4) and (5); and

(b) comply, if applicable, with the requirements of paragraph (6).

(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, is measured at any cross-section at right angles to the side shell, as specified below:

$$w = 0.5 + \frac{DW}{20{,}000} \text{ (m) or}$$

$w = 2.0$ **m**, whichever is the lesser. The minimum value of $w = 1.0$ **m.**

(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 I is not less than specified below:

$h = B/15$ (m) or

$h = 2.0$ in, whichever is the lesser.

The minimum value of $h = 1.0$ **m**.

(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.

(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. 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.

SEE INTERPRETATION 4.12

(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) 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:

$$f \times h_c \times p_c \times g + 100\,\Delta p <= d_n \times p_s \times g$$

where:

h_c = height of cargo in contact with the bottom shell plating in metres

p_c = maximum cargo density in t/m^3

d_n = minimum operating draught under any expected loading condition in metres

p_s = density of seawater in t/m^3

Δp = 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/s^2).

(b) Any horizontal partition necessary to fulfil the above requirements 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) except that, below a level $1.5h$ above the baseline where h is as defined in paragraph (3)(b), the cargo tank boundary line may be vertical down to the bottom plating, as shown in figure 2.

(5) Other methods of design and construction of oil tankers may also be accepted as alternatives to the requirements prescribed in paragraph (3), 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 Marine Environment Protection Committee based on guidelines developed by the Organization.*

*Refer to the Interim guidelines for the approval of alternative methods of design and construction of oil tankers under regulation 13F(5) of Annex I of MARI'OL 73/78 adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.66(37); see appendix 8 to Unified Interpretations of Annex 1, page 182.

(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) complies with the following:

$$h = B / 15 \quad \text{(m)}$$

with a minimum value of $h = 0.76$ m;

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; and

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

$$w = 0.4 + \frac{2.4\,DW}{20{,}000} \quad \text{(m) or}$$

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, Administrations 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.

Regulation 13G

Prevention of oil pollution in the event Of collision or stranding Measures for existing tankers

SEE INTERPRETATION 4.6

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(l) of this Annex; and

(b) not apply to oil tankers complying with regulation 13F of this Annex, which are contracted, the keels of which are laid, or are delivered before the dates specified in regulation 13F(l) of this Annex; 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 this Annex, 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 distances shall comply with regulation 13E(4)(b) of this Annex.

(2) The requirements of this regulation shall take effect as from 6july 1995.

(3) (a) An oil tanker to which this regulation applies shall be 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 Organization.*

* Refer to the Guidelines on the Enhanced Programme of Inspections during Surveys of bulk Carriers and Oil Tankers adopted by the Organization by resolution A.744(18), as amended; see IMO sales publication IMO-180E.

(b) An oil tanker over five years of age to which this regulation applies shall have on board, available to the competent authority of any Government of a State Party to the present Convention, 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.

(c) This file shall be 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 standard format as contained in the guidelines developed by the Organization.

(4) An oil tanker not meeting the requirements of a new oil tanker as defined in regulation 1(26) of this Annex shall comply with the requirements of regulation 13F of this Annex 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), cover at least 30 % of L_t for the full depth of the ship on each side or at least 30% of the projected bottom shell area within the length L_t , where L_t is as defined in regulation 13E(2), in which case compliance with regulation 13F is required not later than 30 years after its date of delivery.

SEE INTERPRETATION 4.13

(5) An oil tanker meeting the requirements of a new oil tanker as defined in regulation 1(26) of this Annex shall comply with the requirements of regulation 13F of this Annex not later than 30 years after its date of delivery.

(6) Any new ballast and load conditions resulting from the application of paragraph (4) of this regulation shall be subject to approval of the Administration which shall have regard, in particular, to longitudinal and local strength, intact stability and, if applicable, damage stability.

(7) Other structural or operational arrangements such as hydrostatically balanced loading may be accepted as alternatives to the requirements prescribed in paragraph (4), 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 Administration based on guidelines developed by the Organization.*

* Refer to the Guidelines for approval of alternative structural or operational arrangements as called for in regulation 13G(7) of Annex I of MARPOL 73/78 adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.64(36); see appendix 7 to Unified Interpretations of annex 1, page 176.

Regulation 14

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

(1) Except as provided in paragraph (2) of this regulation, in new ships of 4,000 tons gross tonnage and above other than oil tankers, and in new oil tankers of 150 tons gross tonnage and above, no ballast water shall be carried in any oil fuel tank.

(2) Where abnormal conditions or the need to carry large quantities of oil fuel render it necessary to carry ballast water which is not a clean ballast in any oil fuel tank, such ballast water shall be discharged to reception facilities or into the sea in compliance with regulation 9 using the equipment specified in regulation 16(2) of this Annex, and an entry shall be made in the Oil Record Book to this effect.

SEE INTERPRETATION 5.1

(3) All other ships shall comply with the requirements of paragraph (1) of this regulation as far as is reasonable and practicable.

SEE INTERPRETATION 5.2

(4) In 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 shall not be carried in a forepeak tank or a tank forward of the collision bulkhead.

(5) All ships other than those subject to paragraph (4) of this regulation shall comply with the provisions of that paragraph, as far as is reasonable and practicable.

Regulation 15

Retention of oil on board

(1) Subject to the provisions of paragraphs (5) and (6) of this regulation, oil tankers of 150 tons gross tonnage and above shall be 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 apply three years after the date of entry into force of the present Convention.

(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 approved by the Administration. 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 discharged into the sea will be such as to comply with the provisions of regulation 9 of this Annex.

(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% of the oil carrying capacity of the ship, except that the Administration may accept:

(i) 2% 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% where segregated ballast tanks or dedicated clean ballast tanks are provided in accordance with regulation 13 of this Annex, or where a cargo tank cleaning system using crude oil washing is fitted in accordance with regulation 13B of this Annex. This capacity may be further reduced to 1.5% 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% for combination carriers where oil cargo is only earned in tanks with smooth walls. This capacity may be further reduced to 0.8% 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.

SEE INTERPRETATION 6.2

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.

SEE INTERPRETATION 6.1

(3) (a) An oil discharge monitoring and control system approved by the Administration shall be fitted. In considering the design of the oil content meter to be incorporated in the system, the Administration shall have regard to the specification recommended by the Organization.* 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 monitoring and control system shall come into operation when there is any discharge of effluent into the sea and shall be such as will ensure that any discharge of oily mixture is automatically stopped when the instantaneous rate of discharge of oil exceeds that permitted by regulation 9(l)(a) of this Annex. 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 as soon as possible. The port State authority may allow the tanker with a defective unit to undertake one ballast voyage before 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 Organization.* Administrations may accept such specific arrangements as detailed in the Guidelines and Specifications.

* For oil content meters installed on tankers built prior to 2 October 1986, refer to the Recommendation on international performance and test specifications for oily-water separating equipment and oil content meters adopted by the Organization by resolution A.393(X). For oil content meters as part of discharge monitoring and control systems installed on tankers built on or after 2 October 1986, refer to the Guidelines and specifications for oil discharge monitoring and control systems for oil tankers, adopted by the Organization by resolution A.586(14); see IMO sales publications IMO-608E and IMO-646E, respectively.

(b) Effective oil/water interface detectors** approved by the Administration 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.

** Refer to the Specifications for oil/water interface detectors adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.5(XIII); see IMO sales publication IMO-646E.

SEE INTERPRETATIONS 6.1 AND 6.3

(c) Instructions as to the operation of the system shall be in accordance with an operational manual approved by the Administration. 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 9 of this Annex.*

* Refer to *Clean Seas Guide for Oil Tankers*, published by the International Chamber of Shipping and the Oil Companies International Marine Forum.

(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 9 of this Annex 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 9 of this Annex are complied with.

(5) (a) The Administration 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 State Party to the present Convention. 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 Administration that facilities available to receive such oily mixtures are adequate.

(b) The Administration 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 tons deadweight or above, as referred to in regulation 13C(l) of this Annex, engaged in specific trades, and the conditions specified in regulation 13C(2) are complied with; or

(ii) the tanker is engaged exclusively in one or more of the following categories of voyages:

(1) voyages within special areas; or
(2) voyages within 50 miles from the nearest land outside special areas where the tanker is engaged in:

(aa) trades between ports or terminals of a State Party to the present Convention; or

(bb) restricted voyages as determined by the Administration, and of 72 hours or less in duration;

provided that all of the following conditions are complied with :

(3) all oily mixtures are retained on board for subsequent discharge to reception facilities;

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

(5) the International Oil Pollution Prevention Certificate, when required, is endorsed to the effect that the ship is exclusively engaged in one or more of the categories of voyages specified in subparagraphs (b)(ii)(1) and (b)(ii)(2)(bb) of this paragraph; and

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

SEE INTERPRETATION 6.4

(6) Where in the view of the Organization equipment required by regulation 9(l)(a)(vi) of this Annex and specified in subparagraph (3)(a) of this regulation is not obtainable for the monitoring of discharge of light refined products (white oils), the Administration may waive compliance with such requirement, provided that discharge shall be permitted only in compliance with procedures established by the Organization which shall satisfy the conditions of regulation 9(l)(a) of this Annex except the obligation to have an oil discharge monitoring and control system in operation. The Organization shall review the availability of equipment at intervals not exceeding twelve months.

(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 this Annex, which through their physical properties inhibit effective product/water separation and monitoring, for which the control of discharge under regulation 9 of this Annex shall be effected by the retention of residues on board with discharge of all contaminated washings to reception facilities.

SEE INTERPRETATION 6.5

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

(1) Any ship of 400 tons gross tonnage and above but less than 10,000 tons gross tonnage shall be fitted with oil filtering equipment complying with paragraph (4) this regulation. Any such ship which carries large quantities of oil fuel shall comply with paragraph (2) of this regulation or paragraph (1) of regulation 14.

SEE INTERPRETATIONS 7.1 AND 7.2

(2) Any ship of 10,000 tons gross tonnage and above shall be 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.

SEE INTERPRETATION 7.2

(3) (a) The Administration may waive the requirements of paragraphs (1) and (2) of this regulation for any ship engaged exclusively on voyages within special areas provided that all of the following conditions are complied with:

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

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

(iii) the Administration 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;

(iv) the International Oil Pollution Prevention Certificate, when required, is endorsed to the effect that the ship is exclusively engaged on the voyages within special areas; and

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

SEE INTERPRETATIONS 6.4 AND 7.3

(b) The Administration shall ensure that ships of less than 400 tons gross tonnage are equipped, as far as practicable, to retain on board oil or oily mixtures or discharge them in accordance with the requirements of regulation 9(l)(b) of this Annex.

(4) Oil filtering equipment referred to in paragraph (1) of this regulation shall be of a design approved by the Administration 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 Administration shall have regard to the specification recommended by the Organization. *

* Refer, to the Guidelines and specifications for pollution prevention equipment for machinery space bilges of ships adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.60(33); see IMO sales publication IMO-646E.

(5) Oil filtering equipment referred to in paragraph (2) of this regulation shall be of a design approved by the Administration and shall be 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. It shall be provided with alarm arrangements to indicate when this level cannot be maintained. The system shall also be 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 Administration shall have regard to the specification recommended by the Organization.*

(6) 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).

SEE INTERPRETATION 7.4

Regulation 17

Tanks for oil residues (sludge)

(1) Every ship of 400 tons gross tonnage and above shall be provided with a tank or tanks of adequate capacity, having regard to the type of machinery and length of voyage, to receive the oil residues (sludge) which cannot be dealt with otherwise in accordance with the requirements of this Annex, such as those resulting from the purification of fuel and lubricating oils and oil leakages in the machinery spaces.

SEE INTERPRETATION 8.1

(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.

SEE INTERPRETATION 8.2

(3) Piping to and from sludge tanks shall have no direct connection overboard, other than the standard discharge connection referred to in regulation 19.

SEE INTERPRETATION 8.3

Regulation 18

Pumping, piping and discharge arrangements of oil tankers

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

(2) In every oil tanker, pipelines for the discharge to the sea of ballast water or oil contaminated water from cargo tank areas which may be permitted under regulation 9 or regulation 10 of this Annex shall be 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 subparagraphs (6)(a) to (e) of this regulation may be accepted.

SEE INTERPRETATION 9.1

(3) In new oil tankers means shall be 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 (6) of this regulation, from a position on the upper deck or above located so that the manifold in use referred to in paragraph (1) of this regulation and the discharge to the sea from the

pipelines referred to in paragraph (2) 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.

(4) Every new oil tanker required to be provided with segregated ballast tanks or fitted with a crude oil washing system shall comply with the following requirements:

(a) it shall be equipped with oil piping so designed and installed that oil retention in the lines is minimized; and

(b) means shall be provided to drain all cargo pumps and all oil lines at the completion of cargo discharge, where necessary by connection to a stripping device. The line and pump drainings shall be capable of being discharged both ashore and to a cargo tank or a slop tank. For discharge ashore a special small diameter line shall be provided and shall be connected outboard of the ship's manifold valves.

SEE INTERPRETATIONS 9.2 AND 9.3

(5) Every existing crude oil tanker 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, shall comply with the provisions of paragraph (4)(b) of this regulation.

(6) On every oil tanker the discharge of ballast water or oil contaminated water from cargo tank areas shall take place above the waterline, except as follows:

(a) 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.

(b) Existing oil tankers which, without modification, are not capable of discharging segregated ballast above the waterline may discharge segregated 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.

(c) 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 waterline, may discharge this ballast below the waterline provided that the discharge of the ballast water is supervised in accordance with regulation 13A(3) of this Annex.

(d) 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 this Annex, 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.

(e) 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 (d) 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 Administration, 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 Organization.*

* See appendix 5 to Unified Interpretations for Annex 1, page 170.

SEE INTERPRETATION 9.4

Regulation 19

Standard discharge connection

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

Standard dimensions of flanges **for discharge connections**

Description	Dimension
outside diameter	215 mm
Inner diameter	According to pipe outside diameter
Bolt circle diameter	183 mm
Slots in flange	6 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 mm
Flange thickness	20 mm
Bolts and nuts: quantity, diameter	6, 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/cm^2	

Regulation 20
Oil Record Book

(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 with an Oil Record Book Part I (Machinery Space Operations). Every oil tanker of 150 tons gross tonnage and above shall also be provided with an Oil Record Book Part 11 (Cargo/Ballast Operations). The Oil Record Book(s), whether as a part of the ship's official log-book or otherwise, shall be in the form(s) specified in appendix III to this Annex.

(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 space 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);
(iiv) 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 regulation 11 of this Annex or in the event of accidental or other exceptional discharge of oil not excepted by that regulation, a statement shall be made in the Oil Record Book of the circumstances of, and the reasons for, the discharge.

(4) Each operation described in paragraph (2) of this regulation shall be fully recorded without delay in the Oil Record Book so that all 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 ship. The entries in the Oil Record Book shall be in an official language of the State whose flag the ship is entitled to fly, and, for ships holding an International Oil Pollution Prevention Certificate, in English or French. The entries in an official national language of the State whose flag the ship is entitled to fly shall prevail in case of a dispute or discrepancy.

(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) The competent authority of the Government of a Party to the Convention may inspect the Oil Record Book on board any ship to which this Annex applies while the ship is in its port or offshore terminals and may make a copy of any entry in that book and may require the master of the ship to certify that the copy is a true copy of such entry. Any copy so made which has been certified by the master of the ship as a true copy of an entry in the ship's Oil Record Book shall be made admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of an Oil Record Book and the taking of a certified copy by the competent authority under this paragraph shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

(7) For oil tankers of less than 150 tons gross tonnage operating in accordance with regulation 15(4) of this Annex an appropriate Oil Record Book should be developed by the Administration.

Regulation 21

Special requirements for drilling rigs and other platforms

SEE INTERPRETATION 10

Fixed and floating drilling rigs when engaged in the exploration, exploitation and associated offshore processing of sea-bed mineral resources and other platforms shall comply with the requirements of this Annex 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 this Annex;

(b) they shall keep a record of all operations involving oil or oily mixture discharges, in a form approved by the Administration; and

(c) subject to the provisions of regulation 11 of this Annex, the discharge into the sea of oil or oily mixture shall be prohibited except when the oil content of the discharge without dilution does not exceed 15 parts per million.

Chapter III - Requirements for minimizing oil pollution from oil tankers due to side and bottom damages

Regulation 22
Damage assumptions

(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

(1)	Longitudinal extent (l_c):	$^1/_3$ **L** $^{2/3}$ or **14.5** metres, Whichever is less
(ii)	Transverse extent (t_c) (inboard from the ship's side at right angles to the centre-line at the level corresponding to the assigned summer freeboard):	$\mathbf{B}/_5$ or **11.5** metres, whichever is less
(iii)	Vertical extent *(V_c):*	From the base line upwards without limit

(b) Bottom damage

		For *0.3L from the forward perpendicular of the ship*	*Any other part of the ship*
(i)	Longitudinal extent ((l_s):	$L/_{10}$	$L/_{10}$ or **5** metres, whichever is less
(ii)	Transverse extent (t_s):	$B/_6$ or 10 metres, whichever is less but not less than **5** metres	**5** metres
(iii)	Vertical extent from the base line *(V_s): :*	$B/_{15}$ - or **6** metres, whichever is less	

SEE INTERPRETATION 11

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

Regulation 23
Hypothetical outflow of oil

SEE INTERPRETATION 11.2

The hypothetical outflow of oil in the case of side damage (O_S) and bottom damage (O_C) 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 this Annex.

(a) For side damages: $O_C = \Sigma W_i + \Sigma K_i C_i$ (1)

(b) For bottom damages:

$$O_S = {}^1/_3 \, (\Sigma Z_i W_i + \Sigma Z_i C_i) \quad (11)$$

where: W_i = volume of a wing tank in cubic metres assumed to be breached by the damage as specified in regulation 22 of this Annex; Wi for a segregated ballast tank may be taken equal to zero.

C_i = volume of a centre tank in cubic metres assumed to be breached by the damage as specified in regulation 22 of this Annex; C_i for a segregated ballast tank may be taken equal to zero.

$K_i = 1 - {}^{b_i}/_{t_C}$ when b_i is equal to or greater than t_C, K_i shall be taken equal to zero.

$Z_i = 1 - {}^{h_i}/_{V_C}$ when h_i is equal to or greater than V_C, Z_i shall be taken equal to zero.

b_i 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.

h_i 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 chapter, they have the meaning as defined in this regulation.

SEE INTERPRETATION 11.3

(2) If a void space or segregated ballast tank of a length less than l_C as defined in regulation 22 of this Annex is located between wing oil tanks, O_C in formula (1) may be calculated on the basis of volume W_i 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 S_i as defined below and taking for all other wing tanks involved in such a collision the value of the actual full volume.

$$S_i = 1 - {}^{l_i}/_{l_C}$$

where l_i = 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 (11) 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 h_i 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 O_s, may be calculated according to the formula

$$O_s = {}^1/_4 (\Sigma Z_i W_i + \Sigma Z_i C_i) \qquad \text{(III)}$$

(5) An Administration 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 O_s , according to formula (III). The pipes for such suctions shall be installed at least at a height not less than the vertical extent of the bottom damage v_s ,. The Administration shall supply the Organization with the information concerning the arrangements accepted by it, for circulation to other Parties to the Convention.

Regulation 24

Limitation of size and arrangement of cargo tanks

SEE INTERPRETATION 1.2

(1) Every new oil tanker shall comply with the provisions of this regulation. Every existing oil tanker shall be required, within two years after the date of entry into force of the present Convention, to comply with the provisions of this regulation if such a tanker falls into either of the following categories:

(a) a tanker, the delivery of which is after I January 1977; or
(b) 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.

(2) Cargo tanks of oil tankers shall be of such size and arrangements that the hypothetical outflow ***Oc***, or ***Os*** , calculated in accordance with the provisions of regulation 23 of this Annex anywhere in the length of the ship does not exceed 30,000 m^3 or 400 $\sqrt[3]{V_{DW}}$, whichever is the greater, but subject to a maximum of 40,000 m^3

(3) The volume of any one wing cargo oil tank of an oil tanker shall not exceed 75% of the limits of the hypothetical oil outflow referred to in paragraph (2) of this regulation. The volume of any one centre cargo oil tank shall not exceed 50,000 m^3 . However, in segregated ballast oil tankers as defined in regulation 13 of this Annex, 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***,.

(4) The length of each cargo tank shall not exceed 10 m or one of the following values, whichever is the greater:

(a) where no longitudinal bulkhead is provided inside the cargo tanks:

$$(0.5\,{}^{bi}/_{B} + 0.1)L$$ but not to exceed $0.2L$

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

$$(0.25\,{}^{bi}/_{B} + 0.15)L$$

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

(i) for wing cargo tanks : $0.2L$
(ii) for centre cargo tanks:

(1) if ${}^{bi}/_{B}$ is equal to or greater than one fifth: $0.2L$

(2) if ${}^{bi}/_{B}$ is less than one fifth:
- where no centreline longitudinal bulkhead is provided:

$$(0.5\,{}^{bi}/_{B} + 0.1)L$$

- where a centreline longitudinal bulkhead is provided:

$$(0.25\,{}^{bi}/_{B} + 0.15)L$$

(d) ***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.

(5) In order not to exceed the volume limits established by paragraphs (2), (3) and (4) 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 shall be provided for separating the tanks from each other. These valves or devices shall be closed when the tanker is at sea.

(6) Lines of piping which run through cargo tanks in a position less than ***tc*** from the ship's side or less than ***Vs*** from the ship's bottom shall be fitted with valves or similar closing devices at the point at which they open into any cargo tank. These valves shall be 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.

Regulation 25

Subdivision and stability

(1) Every new oil tanker shall comply 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. Such damage shall be applied to au conceivable locations along the length of the ship as follows:

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

(b) in tankers of more than 150 m, but not exceeding 225 m 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 m in length, anywhere in the ship's length between adjacent transverse bulkheads with the exception of the machinery space. For tankers of 100 m 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, Administrations may allow relaxations from these requirements.

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

SEE INTERPRETATION 11.4

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

(a)	Side damage	
(i)	Longitudinal extent :	$^{1}/_{3}$ **L** $^{2/3}$ or **14.5** metres, Whichever is less
(ii)	Transverse extent (inboard from the ship's side at right angles to the centre-line at the level of the summer load line):	$\mathbf{B}/_{\mathbf{5}}$ or **11.5** metres, whichever is less
(iii)	Vertical extent *:*	From the moulded line of the bottom shell plating at centre-line, upwards without limit

(b) Bottom damage

	For *0.3L from the forward perpendicular of the ship*	*Any other part of the ship*

(i)	Longitudinal extent :	$^1/_3$ **L** $^{2/3}$ or 14.5 metres whichever is less	$^1/_3$ **L** $^{2/3}$ or **5** metres, whichever is less
(ii)	Transverse extent :	$B/6$ or 10 metres, whichever is less	$B/6$ or **5** metres whichever is less
(iii)	Vertical extent	$B/15$ - or **6** metres, whichever is less measured from the moulded line of the bottom shell plating at centreline	$B/15$ - or **6** metres, 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 subparagraphs (4)(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 subparagraph (a) of this paragraph 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 subparagraph (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 recess in a transverse bulkhead of more than 3.05 m 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.

SEE INTERPRETATION 11.5

(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 sidescuttles of the non-opening type.

(b) In the final stage of flooding, the angle of heel due to unsymmetrical flooding shall not exceed 25^o, provided that this angle may be increased up to 30^o 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^{o} beyond the position of equilibrium in association with a maximum residual righting lever of at least 0.1 m within the 20^{o} 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) o this paragraph and other openings capable of being close weathertight may be permitted.

(d) The Administration shall be satisfied that the stability is sufficient during intermediate stages of flooding.

(e) Equalization 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 equalization 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, configuration 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	*Permeabilities*
Appropriated to stores	0.60
Occupied by accommodation	0.95
Occupied by machinery	0.85
Voids	0.95
Intended for consumable liquids	0 to 0.95*
Intended for other liquids	0 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 subparagraph (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^{o} for each individual compartment. The Administration may require or allow the free surface corrections to be calculated at an angle of heel greater than 5^{o} for partially filled tanks.

(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 new non-self-propelled oil tanker to which this Annex applies shall be supplied 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 subparagraph (1)(c) of this regulation.

Chapter IV - Prevention of pollution arising from an oil pollution incident

Regulation 26
Shipboard oil pollution emergency plan

(1) Every 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 carry on board a shipboard oil pollution emergency plan approved by the Administration. In the case of ships built before 4 April 1993 this requirement shall apply 24 months after that date.

SEE INTERPRETATIONS 12.1 AND 12.2

(2) Such a plan shall be in accordance with guidelines* developed by the Organization and written in the working language of the master and officers. The plan shall consist at least of-.

(a) the procedure to be followed by the master or other persons having charge of the ship to report an oil pollution incident, as required in article 8 and Protocol I of the present Convention, based on the guidelines developed by the Organization; **

(b) the list of authorities or persons to be contacted in the event of an oil pollution incident;

(c) a detailed description of the action to be taken immediately by persons on board to reduce or control the discharge of oil following the incident; and

(d) the procedures and point of contact on the ship for coordinating shipboard action with national and local authorities in combating the pollution.

*Refer to the Guidelines for the development of shipboard oil pollution emergency plans adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.54(32); see IMO sales publication IMO-586E.

** Refer to the General principles for ship reporting systems and ship reporting requirements, including Guidelines for reporting incidents involving dangerous goods, harmful substances and/or marine pollutants adopted by the Organization by resolution A.648(16); see IMO sales publication IMO-516E.

Appendices to Annex I

Appendix I

List of oils*

Asphalt solutions
Blending stocks
Roofers flux
Straight run residue

Oils
Clarified
Crude oil
Mixtures containing crude oil
Diesel oil
Fuel oil no. 4
Fuel oil no. 5
Fuel oil no. 6
Residual fuel oil
Road oil
Transformer oil
Aromatic oil (excluding vegetable oil)
Lubricating oils and blending stocks
Mineral oil
Motor oil
Penetrating oil
Spindle oil
Turbine oil

Distillates
Straight run
Flashed feed stocks

Gas oil
Cracked

Gasoline blending stocks
Alkylates - fuel
Reformates
Polymer - fuel

Gasolines
Casinghead (natural)
Automotive
Aviation
Straight run
Fuel oil no. 1 (kerosene)
Fuel oil no. I -D
Fuel oil no. 2
Fuel oil no. 2-D

Jet fuels
JP-1 (kerosene)
JP-3
JP-4
JP-5 (kerosene, heavy)
Turbo fuel
Kerosene
Mineral spirit

Naphtha
Solvent
Petroleum
Heartcut distillate oil

* This list of oils shall not necessarily be considered as comprehensive.

Appendix III ***Form of*** **Oil Record Book**

OIL RECORD BOOK

PART I - Machinery space operations
(All ships)

Name of ship:

Distinctive number

or letters:

Gross tonnage:

Period from: to:

Note: Oil Record Book Part I shall be provided to every oil tanker of 1 50 tons gross tonnage and above and every ship of 400 tons gross tonnage and above, other than oil tankers, to record relevant machinery space operations. For oil tankers, Oil Record Book Part 11 shall also be provided to record relevant cargo/ballast operations.

Introduction

The following pages of this section show a comprehensive list of items of machinery space 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, 1 973, as modified by the Protocol of 1 978 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.

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 identity 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,

(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] Only in the tank listed in item 3 of Form A and B of the Supplement to the IOPP Certificate.

- .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) …… m^3
  - total quantity of retention …… m^3

- .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) …… m^3
  - total quantity of retention…… m^3

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));

[2] Ships' 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.

(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.
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.
26. 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

OIL RECORD BOOK

PART II - Cargo/ballast operations

(Oil tankers)

Name of ship:

Distinctive number
or letters:

Gross tonnage:

Period from: to:

Note: Every oil tanker of 150 tons gross tonnage and above shall be Provided with Oil Record Book Part 11 to record relevant cargo/ballast operations. Such a tanker shall also be provided with Oil Record Book Part I to record relevant machinery space operations.

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 code letter.

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 countersigned by the master of the ship. In respect of the oil tankers engaged in specific trades in accordance with regulation I 3C 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.

* The 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.

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

[2] In accordance with the Operations and Equipment Manual, enter whether single-stage or multistage 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-

[3] If 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:
   .1 identity 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)-l state quantity transferred and total quantity).

[4] Hand-hosing, machine washing and/or chemical cleaning. Where chemically cleaned, the chemical concerned and amount used should be stated.

(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?
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]

[5] Ships' masters should obtain from the operator of the reception facoities, which include barges and tank trucks, a receipt or certificate detailing the quantity of tank washings, dirty ballast, residues or oily mixtures Transferred, together vath 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 certigcate should be kept together with the Oil Record Book.

(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.

(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.

[5] Ships' masters should obtain from the operator of the reception facoities, which include barges and tank trucks, a receipt or certificate detailing the quantity of tank washings, dirty ballast, residues or oily mixtures Transferred, together vath 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 certigcate should be kept together with the Oil Record Book.

(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.

(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.

(0) 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.

8 1. 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.

Annex IV of MARPOL 73/78*

* On the publication date of the 1997 Consolidated Edition, Annex IV had not met the conditions of entry into force. This Annex is under revision by the Marine Environment Protection Committee of the Organization.

Regulations for the Prevention of Pollution by Sewage from Ships

Regulation 1
Definitions

For the purposes of the present Annex:

(1) ***New ship*** means a ship:

(a) for which the building contract is placed, or in the absence of a building contract, the keel of which is laid , or which is at a similar stage of construction, on or after the date of entry into force of this Annex; or

(b) the delivery of which is three years or more after the date of entry into force of this Annex.

(2) ***Existing ship*** means a ship which is not a new ship.

(3) ***Sewage*** means:
(a) drainage and other wastes from any form of toilets, urinals, and WC scuppers;
(b) drainage from medical premises (dispensary, sick bay, etc.) via wash basins, wash tubs and scuppers located in such premises;
(c) drainage from spaces containing living animals; or
(d) other waste waters when mixed with the drainages defined above.

(4) ***Holding tank*** means a tank used for the collection and storage of sewage.

(5) ***Nearest land***. The term "from the nearest land" means from the baseline from which the territorial sea of the territory in question is established in accordance with international law 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 11º00' S, longitude 142º08' E
to a point in latitude 10º35' S, longitude 141º55' E
thence to a point latitude 10º00' S, longitude 142º00' E
thence to a point latitude 9º10' S, longitude 143º52' E
thence to a point latitude 9º00' S, longitude 144º30'E
thence to a point latitude 13º00' S, longitude 144º00' E
thence to a point latitude 15º 00' S, longitude 146º00' E
thence to a point latitude 18º00' S, longitude 147º00' E
thence to a point latitude 21º00' S, longitude 153º00' E
thence to a point on the coast of Australia in latitude 24º42' S, longitude 153º15' E.

Regulation 2
Application

The provisions of this Annex shall apply to:

(a) **(i)** new ships of 200 tons gross tonnage and above;

(ii) new ships of less than 200 tons gross tonnage which are certified to carry more than 10 persons;

(iii) new ships which do not have a measured gross tonnage and are certified to carry more than 10 persons; and

(b) (i) existing ships of 200 tons gross tonnage and above, 10 years after the date of entry into force of this Annex;

(ii) existing ships of less than 200 tons gross tonnage which are certified to carry more than 10 persons, 10 years after the date of entry into force of this Annex; and

(iii) existing ships which do not have a measured gross tonnage and are certified to carry more than 10 persons, 10 years after the date of entry into force of this Annex.

Regulation 3
Surveys

(1) Every ship which is required to comply with the provisions of this Annex and which is engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention shall be subject to the surveys specified below:

(a) An initial survey before the ship is put in service or before the certificate required under regulation 4 of this Annex is issued for the first time, which shall include a survey of the ship which shall be such as to ensure:

(i) when the ship is fitted with a sewage treatment plant the plant shall meet operational requirements based on standards and the test methods developed by the Organization;*

*Refer to the Recommendation on international effluent standards and guidelines for performance tests for sewage treatment plants adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.2(VI); see IMO sales publication IMO-592E.

(ii) when the ship is fitted with a system to comminute and disinfect the sewage, such a system shall be of a type approved by the Administration;

(iii) when the ship is equipped with a holding tank the capacity of such tank shall be to the satisfaction of the Administration for the retention of all sewage having regard to the operation of the ship, the number of persons on board and other relevant factors. The holding tank shall have a means to indicate visually the amount of its contents; and

(iv) that the ship is equipped with a pipeline leading to the exterior convenient for the discharge of sewage to a reception facility and that such a pipeline is fitted with a standard shore connection in compliance with regulation 11 of this Annex. This survey shall be such as to ensure that the equipment, fittings, arrangements and material fully comply with the applicable requirements of this Annex.

(b) Periodical surveys at intervals specified by the Administration but not exceeding five years which shall be such as to ensure that the equipment, fittings, arrangements and material fully comply with the applicable requirements of this Annex. However, where the duration of the International Sewage Pollution Prevention Certificate (1973) is extended as specified in regulation 7(2) or (4) of this Annex, the interval of the periodical survey may be extended correspondingly.

(2) The Administration shall establish appropriate measures for ships which are not subject to the provisions of paragraph (1) of this regulation in order to ensure that the provisions of this Annex are complied with.

(3) Surveys of the ship as regards enforcement of the provisions of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it. In every case the Administration concerned fully guarantees the completeness and efficiency of the surveys.

(4) After any survey of the ship under this regulation has been completed, no significant change shall be made in the equipment, fittings, arrangements, or material covered by the survey without the approval of the Administration, except the direct replacement of such equipment or fittings.

Regulation 4
Issue of certificate

(1) An International Sewage Pollution Prevention Certificate (1973) shall be issued, after survey in accordance with the provisions of regulation 3 of this Annex, to any ship which is engaged in voyages to ports or offshore terminals under the Jurisdiction of other Parties to the Convention.

(2) Such certificate shall be issued either by the Administration or by any persons or organization duly authorized by it. In every case the Administration assumes full responsibility for the certificate.

Regulation 5
Issue of a certificate by another Government

(1) The Government of a Party to the Convention may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the provisions of this Annex are complied with, shall issue or authorize the

issue of an International Sewage Pollution Prevention Certificate (1973) to the ship in accordance with this Annex.

(2) A copy of the certificate and a copy of the survey report shall be transmitted as early as possible to the Administration requesting the survey.

(3) A certificate so issued shall contain a statement to the effect that it has been issued at the request of the Administration and it shall have the same force and receive the same recognition as the certificate issued under regulation 4 of this Annex.

(4) No International Sewage Pollution Prevention Certificate (1973) shall be issued to a ship which is entitled to fly the flag of a State which is not a Party.

Regulation 6
Form of certificate

The International Sewage Pollution Prevention Certificate (1973) shall be drawn up in an official language of the issuing country in the form corresponding to the model given in the appendix to this Annex. if the language used is neither English nor French, the text shall include a translation into one of these languages.

Regulation 7
Duration of certificate

(1) The International Sewage Pollution Prevention Certificate (1973) shall be issued for a period specified by the Administration, which shall not exceed five years from the date of issue, except as provided in paragraphs (2), (3) and (4) of this regulation.

(2) If a ship at the time when the certificate expires is not in a port or offshore terminal under the jurisdiction of the Party to the Convention whose flag the ship is entitled to fly, the certificate may be extended by the Administration, but such extension shall be granted only for the purpose of allowing the ship to complete its voyage to the State whose flag the ship is entitled to fly or in which it is to be surveyed and then only in cases where it appears proper and reasonable to do so.

(3) No certificate shall be thus extended for a period longer than five months and a ship to which such extension is granted shall not on its arrival in the State whose flag it is entitled to fly or the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port or State without having obtained a new certificate.

(4) A certificate which has not been extended under the provisions of paragraph (2) of this regulation may be extended by the Administration for a period of grace of up to one month from the date of expiry stated on it.

(5) A certificate shall cease to be valid if significant alterations have taken place in the equipment, fittings, arrangement or material required without the approval of the Administration, except the direct replacement of such equipment or fittings.

(6) A certificate issued to a ship shall cease to be valid upon transfer of such a ship to the flag of another State, except as provided in paragraph (7) of this regulation.

(7) Upon transfer of a ship to the flag of another Party, the certificate shall remain in force for a period not exceeding five months provided that it would not have expired before the end of that period, or until the Administration issues a replacement certificate, whichever is earlier. As soon as possible after the transfer

has taken place the Government of the Party whose flag the ship was formerly entitled to fly shall transmit to the Administration a copy of the certificate carried by the ship before the transfer and, if available, a copy of the relevant survey report.

Regulation 8
Discharge of sewage

(1) Subject to the provisions of regulation 9 of this Annex, the discharge of sewage into the sea is prohibited, except when:

(a) the ship is discharging comminuted and disinfected sewage using a system approved by the Administration in accordance with regulation 3(l)(a) at a distance of more than 4 nautical miles from the nearest land, or sewage which is not comminuted or disinfected at a distance of more than 12 nautical miles from the nearest land, provided that in any case, the sewage that has been stored in holding tanks shall not be discharged instantaneously but at a moderate rate when the ship is *en route* and proceeding at not less than 4 knots; the rate of discharge shall be approved by the Administration based upon standards developed by the Organization; or

(b) the ship has in operation an approved sewage treatment plant which has been certified by the Administration to meet the operational requirements referred to in regulation 3(l)(a)(i) of this Annex, and

(i) the test results of the plant are laid down in the ship's International Sewage Pollution Prevention Certificate (1973);

(ii) additionally, the effluent shall not produce visible floating solids in, nor cause discoloration of, the surrounding water; or

(c) the ship is situated in the waters under the jurisdiction of a State and is discharging sewage in accordance with such less stringent requirements as may be imposed by such State.

(2) When the sewage is mixed with wastes or waste water having different discharge requirements, the more stringent requirements shall apply.

Regulation 9
Exceptions

Regulation 8 of this Annex shall not apply to:

(a) the discharge of sewage from a ship necessary for the purpose of securing the safety of a ship and those on board or saving life at sea; or

(b) the discharge of sewage resulting from damage to a ship or its equipment if all reasonable precautions have been taken before and after the occurrence of the damage, for the purpose of preventing or minimizing the discharge.

Regulation 1 0

Reception facilities

(1) The Government of each Party to the Convention undertakes to ensure the provision of facilities at ports and terminals for the reception of sewage, without causing undue delay to ships, adequate to meet the needs of the ships using them.

(2) The Government of each Party shall notify the Organization for transmission to the Contracting Governments concerned of all cases where the facilities provided under this regulation are alleged to be inadequate.

Regulation 11
Standard discharge connections

To enable pipes of reception facilities to be connected with the ship's discharge pipeline, both lines shall be fitted with a standard discharge connection in accordance with the following table:

Standard dimensions of flanges for discharge connections

Description	***Dimension***
Outside diameter	210 mm
Inner diameter	According to pipe outside diameter
Bolt circle diameter	170 mm
Slots in flange	4 holes 18 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. The slot width to be 18 mm
Flange thickness	16 mm
Bolts and nuts: quantity and diameter	4, each of 16 mm in diameter and of suitable length
The flange is designed to accept pipes up to a maximum internal diameter of 100 mm and shall be of steel or other equivalent material having a flat face. This flange, together with a suitable gasket, shall be suitable for a service pressure of 6 kg/cm ^{2}	

For ships having a moulded depth of 5 m and less, the inner diameter of the discharge connection may be 38 mm.

Annex V of MARPOL 73/78 (including amendments)

Regulations for the Prevention of Pollution by Garbage from Ships

Regulation 1
Definitions

For the purposes of this Annex:

(1) ***Garbage*** means all kinds of victual, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the ship and liable to be disposed of continuously or periodically except those substances which are defined or listed in other Annexes to the present Convention.

(2) ***Nearest land.*** The term "from the nearest land" means from the baseline from which the territorial sea of the territory in question is established in accordance with international law 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 1l°00' S, longitude 142°08' E
to a point in latitude 10°35' S, longitude 141°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.

(3) ***Special area*** means a sea area where for recognized 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 garbage is required. Special areas shall include those listed in regulation 5 of this Annex.

Regulation 2
Application

Unless expressly provided other-,vise, the provisions of this Annex shall apply to all ships.

Regulation 3
Disposal of garbage outside special areas

(1) Subject to the provisions of regulations 4, 5 and 6 of this Annex:

(a) the disposal into the sea of all plastics, including but not limited to synthetic ropes, synthetic fishing nets and plastic garbage bags, is prohibited;

(b) the disposal into the sea of the following garbage shall be made as far as practicable from the nearest land but in any case is prohibited if the distance from the nearest land is less than:

(i) 25 nautical miles for dunnage, lining and packing materials which will float;
(ii) 12 nautical miles for food wastes and all other garbage including paper products, rags, glass, metal, bottles, crockery and similar refuse;

(c) disposal into the sea of garbage specified in subparagraph(b)(ii) of this regulation may be permitted when it has passed through a comminuter or grinder and made as far as practicable from the nearest land but in any case is prohibited if the distance from the nearest land is less than 3 nautical miles. Such comminuted or ground garbage shall be capable of passing through a screen with openings no greater than 25 mm.

(2) When the garbage is mixed with other discharges having different disposal or discharge requirements the more stringent requirements shall apply.

Regulation 4
Special requirements for disposal of garbage

(1) Subject to the provisions of paragraph (2) of this regulation, the disposal of any materials regulated by this Annex is prohibited from fixed or floating platforms engaged in the exploration, exploitation and associated offshore processing of sea-bed mineral resources, and from all other ships when alongside or within 500 m of such platforms.

(2) The disposal into the sea of food wastes may be permitted when they have been passed through a comminuter or grinder from such fixed or floating platforms located more than 12 nautical miles from land and all other ships when alongside or within 500 m of such platforms. Such comminuted or ground food wastes shall be capable of passing through a screen with openings no greater than 25 mm.

Regulation 5
Disposal of garbage within special areas

(1) For the purposes of this Annex the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the "Gulfs area", the North Sea area, the Antarctic area and the Wider Caribbean Region, including the Gulf of Mexico and the Caribbean Sea, 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 41º N parallel and bounded to the west by the Straits of Gibraltar at the meridian 5º36'W.

(b) ***The Baltic Sea area*** means the Baltic Sea proper with the Gulf of Bothnia and the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57º 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 41º N.

(d) The ***Red Sea area*** means the Red Sea proper including the Gulfs of Suez and Aqaba bounded at the south by the thumb line between Ras si Ane (12º8.5' N, 43º19.6' E) and Husn Murad (12º40.4' N, 43º30.2' E).

(e) The ***Gulfs area*** means the sea area located north-west of the thumb line between Ras al Hadd (22º30'N, 59º48'E) and Ras al Fasteh (25º 04' N, 61º25' E).

(f) ***The North Sea area*** means the North Sea proper including seas therein with the boundary between:

(i) the North Sea southwards of latitude 62º N and eastwards of longitude 4º W;

(ii) the Skagerrak, the southern limit of which is determined east of the Skaw by latitude 57º44.8' N; and

(iii) the English Channel and its approaches eastwards of longitude 5º W and northwards of latitude 48'30' N.

(g) ***The Antarctic area*** means the sea area south of latitude 60º S.

(h) The ***Wider Caribbean Region***, as defined in article 2, paragraph 1 of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena de Indias, 1983), means the Gulf of Mexico and Caribbean Sea proper including the bays and seas therein and that portion of the Atlantic Ocean within the boundary constituted by the 30º N parallel from Florida eastward to 77º30' W meridian, thence a thumb line to the intersection of 20º N parallel and 59º W meridian, thence a thumb line to the intersection of 7º 20' N parallel and 50º W meridian, thence a thumb line drawn southwesterly to the eastern boundary of French Guiana.

(2) Subject to the provisions of regulation 6 of this Annex:

(a) disposal into the sea of the following is prohibited:

(i) all plastics, including but not limited to synthetic ropes, synthetic fishing nets and plastic garbage bags; and

(ii) all other garbage, including paper products, rags, glass, metal, bottles, crockery, dunnage, lining and packing materials;

(b) except as provided in subparagraph (c) of this paragraph, disposal into the sea of food wastes shall be made as far as practicable from land, but in any case not less than 12 nautical miles from the nearest land;

(c) disposal into the Wider Caribbean Region of food wastes which have been passed through a comminuter or grinder shall be made as far as practicable from land, but in any case not less than 3 nautical miles

from the nearest land. Such comminuted or ground food wastes shall be capable of passing through a screen with openings no greater than 25 mm.

(3) When the garbage is mixed with other discharges having different disposal or discharge requirements the more stringent requirements shall apply.

(4) Reception facilities within special areas:

(a) The Government of each Party to the Convention, the coastline of which borders a special area, undertakes to ensure that as soon as possible in all ports within a special area adequate reception facilities are provided in accordance with regulation 7 of this Annex, taking into account the special needs of ships operating in these areas.

(b) The Government of each Party concerned shall notify the Organization of the measures taken pursuant to subparagraph (a) of this regulation. Upon receipt of sufficient notifications the Organization shall establish a date from which the requirements of this regulation in respect of the area in question shall take effect. The Organization shall notify all Parties of the date so established no less than twelve months in advance of that date.

(c) After the date so established, ships calling also at ports in these special areas where such facilities are not yet available, shall fully comply with the requirements of this regulation.

(5) Notwithstanding paragraph 4 of this regulation, the following rules apply to the Antarctic area:

(a) The Government of each Party to the Convention at whose ports ships depart *e route* to or arrive from the Antarctic area undertakes to ensure that as soon as practicable adequate facilities are provided for the reception of all garbage from all ships, without causing undue delay, and according to the needs of the ships using them.

(b) The Government of each Party to the Convention shall ensure that all ships entitled to fly its flag, before entering the Antarctic area, have sufficient capacity on board for the retention of all garbage while operating in the area and have concluded arrangements to discharge such garbage at a reception facility after leaving the area.

Regulation 6
Exceptions

Regulations 3, 4 and 5 of this Annex shall not apply to:

(a) the disposal of garbage from a ship necessary for the purpose of securing the safety of a ship and those on board or saving life at sea; or

(b) the escape of garbage resulting from damage to a ship or its equipment provided all reasonable precautions have been taken before and after the occurrence of the damage, for the purpose of preventing or minimizing the escape; or

(c) the accidental loss of synthetic fishing nets, provided that all reasonable precautions have been taken to prevent such loss.

Regulation 7
Reception facilities

(1) The Government of each Party to the Convention undertakes to ensure the provision of facilities at ports and terminals for the reception of garbage, without causing undue delay to ships, and according to the needs of the ships using them.

(2) The Government of each Party shall notify the Organization for transmission to the Parties concerned of all cases where the facilities provided under this regulation are alleged to be inadequate.

Regulation 8
*Port State control on operations requirements**

* Refer to the Procedures for port State control adopted by the Organization by resolution A.787(19); see IMO sales publication IMO-650E.

(1) A ship when in a port of another Party is subject to inspection by officers duly authorized by such Party concerning operational requirements under this Annex, where there are clear grounds for believing that the master or crew are not familiar with essential shipboard procedures relating to the prevention of pollution by garbage.

(2) In the circumstances given in paragraph (1) of this regulation, the Party shall take such steps as will ensure that the ship shall not sail until the situation has been brought to order in accordance with the requirements of this Annex.

(3) Procedures relating to the port State control prescribed in article 5 of the present Convention shall apply to this regulation.

(4) Nothing in this regulation shall be construed to limit the rights and obligations of a Party carrying out control over operational requirements specifically provided for in the present Convention.

Regulation 9
Placards, garbage management plans and garbage record-keeping

(1) (a) Every ship of 12 m or more in length overall shall display placards which notify the crew and passengers of the disposal requirements of regulations 3 and 5 of this Annex, as applicable.

(b) The placards shall be written in the official language of the State whose flag the ship is entitled to fly and, for ships engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention, in English or French.

(2) Every ship of 400 tons gross tonnage and above, and every ship which is certified to carry 15 persons or more, shall carry a garbage management plan which the crew shall follow. This plan shall provide written procedures for collecting, storing, processing and disposing of garbage, including the use of the equipment on board. It shall also designate the person in charge of carrying out the plan. Such a plan shall be in accordance with the guidelines developed by the Organization* and written in the working language of the crew.

* Refer to the Guidelines for the development of garbage management plans adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.70(38); see MEPC/Circ.317 and IMO sales publication IMO-656E.

(3) Every ship of 400 tons gross tonnage and above and every ship which is certified to carry 15 persons or more engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention and every fixed and floating platform engaged in exploration and exploitation of the sea-bed shall be provided with a Garbage Record Book. The Garbage Record Book, whether as a part of the ship's official log-book or otherwise, shall be in the form specified in the appendix to this Annex;

(a) each discharge operation, or completed incineration, shall be recorded in the Garbage Record Book and signed for on the date of the incineration or discharge by the officer in charge. Each completed page of

the Garbage Record Book shall be signed by the master of the ship. The entries in the Garbage Record Book shall be both in an official language of the State whose flag the ship is entitled to fly, and in English or French. The entries in an official national language of the State whose flag the ship is entitled to fly shall prevail in case of a dispute or discrepancy;

(b) the entry for each incineration or discharge shall include date and time, position of the ship, description of the garbage and the estimated amount incinerated or discharged;

(c) the Garbage Record Book shall be kept on board the ship and in such a place as to be available for inspection in a reasonable time. This document shall be preserved for a period of two years after the last entry is made on the record;

(d) in the event of discharge, escape or accidental loss referred to in regulation 6 of this Annex an entry shall be made in the Garbage Record Book of the circumstances of, and the reasons for, the loss.

(4) The Administration may waive the requirements for Garbage Record Books for:

(a) any ship engaged on voyages of 1 hour or less in duration which is certified to carry 15 persons or more; or

(b) fixed or floating platforms while engaged in exploration and exploitation of the sea-bed.

(5) The competent authority of the Government of a Party to the Convention may inspect the Garbage Record Book on board any ship to which this regulation applies while the ship is in its ports or offshore terminals and may make a copy of any entry in that book, and may require the master of the ship to certify that the copy is a true copy of such an entry. Any copy so made, which has been certified by the master of the ship as a true copy of an entry in the ship's Garbage Record Book, shall be admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of a Garbage Record Book and the taking of a certified copy by the competent authority under this paragraph shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

(6) In the case of ships built before I July 1997, this regulation shall apply as from 1 July 1998.

Appendix to Annex V
Form of Garbage Record Book

Name of ship: …….

Distinctive number or letters:…….

IMO No.:……

Period: From:…… To:…….

1 *Introduction*

In accordance with regulation 9 of Annex V of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MAPPOL 73/78), a record is to be kept of each discharge operation or completed incineration. This includes discharges at sea, to reception facilities, or to other ships.

2 *Garbage and garbage management*

Garbage includes all kinds of food, domestic and operational waste excluding fresh fish and parts thereof, generated during the normal operation of the vessel and liable to be disposed of continuously or periodically except those substances which are defined or listed **in** other annexes to MARPOL 73/78 (such as oil, sewage or noxious liquid substances).

The Guidelines for the Implementation of Annex V of MARPOL 73/78* should also be referred to for relevant information.

* Refer to the Guidelines for the Implementation of Annex V of MARPOL 73/78; see IMO sales publication IMO-656E.

3 *Description of the garbage*

The garbage is to be grouped into categories for the purposes of this record book as follows:

1 Plastics
2 Floating dunnage, lining, or packing material
3 Ground-down paper products, rags, glass, metal, bottles, crockery, etc.
4 Paper products, rags, glass, metal, bottles, crockery, etc.
5 Food waste
6 Incinerator ash.

4 *Entries in the Garbage Record Book*

4.1 Entries in the Garbage Record Book shall be made on each of the following occasions:

(a) When garbage is discharged into the sea:
(i) Date and time of discharge
(ii) Position of the ship (latitude and longitude)
(iii) Category of garbage discharged
(iv) Estimated amount discharged for each category in cubic metres
(v) Signature of the officer in charge of the operation.

(b) When garbage is discharged to reception facilities ashore or to other ships:
(i) Date and time of discharge
(ii) Port or facility, or name of ship
(iii) Category of garbage discharged
(IV) Estimated amount discharged for each category in cubic metres
(v) Signature of officer in charge of the operation.

(c) When garbage is incinerated:
(i) Date and time of start and stop of incineration
(ii) Position of the ship (latitude and longitude)
(iii) Estimated amount incinerated in cubic metres
(iv) Signature of the officer in charge of the operation.

(d) Accidental or other exceptional discharges of garbage
(i) Time of occurrence
(ii) Port or position of the ship at time of occurrence
(iii) Estimated amount and category of garbage
(iv) Circumstances of disposal, escape or loss, the reason therefor and general remarks.

4.2 **Receipts**

The master should obtain from the operator of port reception facilities, or from the master of the ship receiving the garbage, a receipt or certificate specifying the estimated amount of garbage transferred. The receipts or certificates must be kept on board the ship with the Garbage Record Book for two years.

4.3 **Amount of garbage**

The amount of garbage on board should be estimated in cubic metres, if possible separately according to category. The Garbage Record Book contains many references to estimated amount of garbage. It is recognized

that the accuracy of estimating amounts of garbage is left to interpretation. Volume estimates will differ before and after processing. Some processing procedures may not allow for a usable estimate of volume, e.g. the continuous processing of food waste. Such factors should be taken into consideration when making and interpreting entries made in a record.

Annex

Amendments to Annexes I and II of MARPOL 73/78

1 MARPOL 73/78, ANNEX I

Regulation 1
Definitions

New definition is added as follows:

"(31) ***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."

Regulation 4
Surveys and Inspections

The existing title is replaced by the following:
"Surveys".

The existing text is replaced by the following:

"(1) Every oil tanker of 150 tons gross tonnage and above, and every other ship of 400 tons gross tonnage and above shall be subject to the surveys specified below:

(a) An initial survey before the ship is put in service or before the Certificate required under regulation 5 of this Annex 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 this Annex. This survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of this Annex.

(b) A renewal survey at intervals specified by the Administration, but not exceeding five years, except where regulation 8(2), 8(5), 8(6) or 8(7) of this Annex 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 this Annex.

(c) An intermediate survey within three months before or after the second anniversary date or within three months before or after the third anniversary date of the 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 this Annex and are in good working order. Such intermediate surveys shall be endorsed on the Certificate issued under regulation 5 or 6 of this Annex.

(d) An annual survey within three months before or after each anniversary date of the 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 (4) of this regulation and that they remain satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed on the Certificate issued under regulation 5 or 6 of this Annex.

(e) An additional survey either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in paragraph (4) 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 this Annex.

(2) The Administration shall establish appropriate measures for ships which are not subject to the provisions of paragraph (1) of this regulation in order to ensure that the applicable provisions of this Annex are complied with.

(3) (a) Surveys of ships as regards the enforcement of the provisions of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it.

(b) An Administration nominating surveyors or recognizing organizations to conduct surveys as set forth in subparagraph (a) of this paragraph shall, as a minimum, empower any nominated surveyor or recognized organization to:

(i) require repairs to a ship; and

(ii) carry out surveys, if requested by the appropriate authorities of a port State.

The Administration shall notify the Organization of the specific responsibilities and conditions of the authority delegated to the nominated surveyors or recognized organizations, for circulation to Parties to the present Protocol for the information of their officers.

(c) When a nominated surveyor or recognized organization determines that the condition of the ship or its equipment does not correspond substantially with the particulars of the Certificate or is such that the ship is not fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment, such surveyor or organization shall immediately ensure that corrective action is taken and shall in due course notify the Administration. If such corrective action is not taken the Certificate should be withdrawn and the Administration shall be notified immediately; and if the ship is in a port of another Party, the appropriate authorities of the port State shall also be notified immediately. When an officer of the Administration, a nominated surveyor or a recognized organization has notified the appropriate authorities of the port State, the Government of the port State concerned shall give such officer, surveyor or organization any necessary assistance to carry out their obligations under this regulation. When applicable, the Government of the port State concerned shall take such steps as will ensure that the ship shall not sail until it can proceed to sea or leave the port for the purpose of proceeding to the nearest appropriate repair yard available without presenting an unreasonable threat of harm to the marine environment.

(d) In every case, the Administration concerned shall fully guarantee the completeness and efficiency of the survey and shall undertake to ensure the necessary arrangements to satisfy this obligation.

(4) (a) The condition of the ship and its equipment shall be maintained to conform with the provisions of the present Convention to ensure that the ship in all respects will remain fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment.

(b) After any survey of the ship under paragraph (1) of this regulation has been completed, no change shall be made in the structure, equipment, systems, fittings, arrangements or material covered by the survey, without the sanction of the Administration, except the direct replacement of such equipment and fittings.

(c) Whenever an accident occurs to a ship or a defect is discovered which substantially affects the integrity of the ship or the efficiency or completeness of its equipment covered by this Annex the master or owner of the ship shall report at the earliest opportunity to the Administration, the recognized organization or the nominated surveyor responsible for issuing the relevant Certificate, who shall cause investigations to be initiated to determine whether a survey as required by paragraph (1) of this regulation is necessary. If the ship is in a port of another Party, the master or owner shall also report immediately to the appropriate authorities of the port State and the nominated surveyor or recognized organization shall ascertain that such report has been made".

Regulation 5
Issue of Certificate

The existing heading is replaced by the following:
"Issue or Endorsement of Certificate".

The existing text is replaced by the following:

"(1) An International Oil Pollution Prevention Certificate shall be issued, after an initial or renewal survey in accordance with the provisions of regulation 4 of this Annex, 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 to the Convention.

(2) Such Certificate shall be issued or endorsed either by the Administration or by any persons or organization duly authorized by it. In every case the Administration assumes full responsibility for the Certificate.

(3) Notwithstanding any other provisions of the amendments to this Annex adopted by the Marine Environment Protection Committee (MEPC) by resolution MEPC.39(29), any International Oil Pollution Prevention Certificate, which is current when these amendments enter into force, shall remain valid until it expires under the terms of this Annex prior to the amendments entering into force."

Regulation 6
Issue of Certificate by another Government The existing heading is replaced by the following:
"Issue or Endorsement of a Certificate by another Government".

The existing text is replaced by the following:

"(1) The Government of a Party to the Convention may, at the request of the Administration, cause a ship to be surveyed and, if satisfied that the provisions of this Annex are complied with, shall issue or authorize the issue of an International Oil Pollution Prevention Certificate to the ship, and where appropriate, endorse or authorize the endorsement of that Certificate on the ship, in accordance with this Annex.

(2) A copy of the Certificate and a copy of the survey report shall be transmitted as soon as possible to the requesting Administration.

(3) A Certificate so issued shall contain a statement to the effect that it has been issued at the request of the Administration and it shall have the same force and receive the same recognition as the Certificate issued under regulation 5 of this Annex.

(4) No International Oil Pollution Prevention Certificate shall be issued to a ship which is entitled to fly the flag of a State which is not a Party."

Regulation 7
Form of Certificate

The existing text is replaced by the following:

"The International Oil Pollution Prevention Certificate shall be drawn up in a form corresponding to the model given in appendix II to this Annex. If the language used is neither English nor French, the text shall include a translation into one of these languages."

Regulation 8
Duration of Certificate

The existing heading is replaced by the following: "Duration and Validity of Certificate".
The existing text is replaced by the following:

"(1) An International Oil Pollution Prevention Certificate shall be issued for a period specified by the Administration which shall not exceed five years.

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

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

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

(3) If a Certificate is issued for a period of less than five years, the Administration 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 4(l)(c) and 4(l)(d) of this Annex applicable when a Certificate is issued for a period of five years are carried out as appropriate.

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

(5) If a ship at the time when a Certificate expires is not in a port in which it is to be surveyed, the Administration 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. No Certificate shall be extended for a period longer than three 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 Certificate. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding five years from the date of expiry of the existing Certificate before the extension was granted.

(6) A 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 Administration for a period of grace 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 five years from the date of expiry of the existing Certificate before the extension was granted.

(7) In special circumstances, as determined by the Administration, a new Certificate need not be dated from the date of expiry of the existing Certificate as required by paragraph (2)(b), (5) or (6) of this regulation. In these special circumstances, the new Certificate shall be valid to a date not exceeding five 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 4 of this Annex, then:

(a) the anniversary date shown on the Certificate shall be amended by endorsement to a date which shall not be more than three months later than the date on which the survey was completed;

(b) the subsequent annual or intermediate survey required by regulation 4 of this Annex 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 4 of this Annex are not exceeded.

(9) A Certificate issued under regulation 5 or 6 of this Annex 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 4(l) of this Annex;

(b) if the Certificate is not endorsed in accordance with regulation 4(l)(c) or 4(l)(d) of this Annex.

(c) Upon transfer of the ship to the flag of another State. A new Certificate shall only be issued when the Government issuing the new Certificate is fully satisfied that the ship is in compliance with the requirements of regulation 4(4)(a) and 4(4)(b) of this Annex. in the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Government of the Party whose flag the ship was formerly entitled to fly shall, as soon as possible, transmit to the Administration copies of the Certificate carried by the ship before the transfer and, if available, copies of the relevant survey reports."