AUGLÝSING

um reglugerð um innleiðingu viðauka við alþjóðasamning um varnir gegn mengun frá skipum, 1973, með breytingum samkvæmt bókun 1978 (MARPOL-samninginn).

1. gr.

Eftirfarandi viðaukar við MARPOL-samninginn öðlast gildi hér á landi með reglugerð nr. 586/2017 um innleiðingu viðauka við alþjóðasamning um varnir gegn mengun frá skipum, 1973, með breytingum samkvæmt bókun 1978 (MARPOL-samninginn), sem birt er í B-deild Stjórnartíðinda:

1. Viðauki I um varnir gegn olíumengun frá skipum.
2. Viðauki II um varnir gegn mengun vegna eitraðra efna í fljótandi formi sem flutt eru í geymum skipa.
3. Viðauki III um varnir gegn mengun af völdum skaðlegra efna sem flutt eru í pökkuðu formi.
4. Viðauki V um varnir gegn sorpmengun frá skipum.

Viðaukar I, II, III og V við MARPOL-samninginn og breytingar við þá eru birtir á ensku í fylgiskjölum 1, 2, 3 og 4 með auglýsingu þessari.

2. gr.

Auglýsing þessi er sett með stoð í a-lið, g-lið, j-lið og s-lið 6. gr. laga nr. 33/2004 um varnir gegn mengun hafs og stranda, sbr. heimild í 2. mgr. 4. gr., sbr. 2. mgr. 3. gr. laga nr. 15/2005 um Stjórnartíðindi og Lögbirtingablað og öðlast þegar gildi.

Þetta er hér með gert almenningi kunnugt.

Umhverfis- og auðlindaráðuneytinu, 6. júní 2017.

F. h. r.

Sigríður Auður Arnardóttir.

Helga Jónsdóttir.

Fylgiskjal 1.

ANNEX 2

RESOLUTION MEPC.117(52)

Adopted on 15 October 2004

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Revised Annex I of MARPOL 73/78)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED the text of the revised Annex I of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(b), (c) and (d) of the 1973 Convention, the revised Annex I of MARPOL 73/78, the text of which is set out at the annex to the present resolution, each regulation being subject to separate consideration by the Parties pursuant to article 16(2)(f)(ii) of the 1973 Convention;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the revised Annex I of MARPOL 73/78 shall be deemed to have been accepted on 1 July 2006, unless, prior to that date, not less than one-third of the Parties or Parties, the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the revised Annex I of MARPOL 73/78 shall enter into force on 1 January 2007 upon its acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the revised Annex I of MARPOL 73/78 contained in the annex; and

5. REQUESTS FURTHER the Secretary-General to transmit copies of the present resolution and its annex to the Members of the Organization which are not Parties to MARPOL 73/78.

ANNEX

CHAPTER 1 - 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 those 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.

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

.1 crude oil from which certain distillate fractions may have been removed; and

.2 crude oil to which certain distillate fractions may have been added.

3 *Oily mixture* means a mixture with any oil content.

4 *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.

5 *Oil tanker* means a ship constructed or adapted primarily to carry oil in bulk in its cargo spaces and includes combination carriers, any "NLS tanker" as defined in Annex II of the present Convention and any gas carrier as defined in regulation 3.20 of chapter II-1 of SOLAS 74 (as amended), when carrying a cargo or part cargo of oil in bulk.

6 *Crude oil tanker* means an oil tanker engaged in the trade of carrying crude oil.

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

8 *Combination carrier* means a ship designed to carry either oil or solid cargoes in bulk.

9 *Major conversion*:

.1 means a conversion of a ship:

.1 which substantially alters the dimensions or carrying capacity of the ship; or

.2 which changes the type of the ship; or

.3 the intent of which in the opinion of the Administration is substantially to prolong its life; or

.4 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.

.2 Notwithstanding the provisions of this definition:

.1 conversion of an oil tanker of 20,000 tonnes deadweight and above delivered on or before 1 June 1982, as defined in regulation 1.28.3, to meet the requirements of regulation 18 of this Annex shall not be deemed to constitute a major conversion for the purpose of this Annex; and

.2 conversion of an oil tanker delivered before 6 July 1996, as defined in regulation 1.28.5, to meet the requirements of regulation 19 or 20 of this Annex shall not be deemed to constitute a major conversion for the purpose of this Annex.

10 *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 11°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 10°41' S, longitude 145°00' E,
thence to a point latitude 13°00' S, longitude 145°00' E,
thence to a point latitude 15°00' S, longitude 146°00' E,
thence to a point latitude 17°30' S, longitude 147°00' E,
thence to a point latitude 21°00' S, longitude 152°55' E,
thence to a point latitude 24°30' S, longitude 154°00' E,
thence to a point on the coast of Australia
in latitude 24°42' S, longitude 153°15' E.

11 *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.

For the purposes of this Annex, the special areas are defined as follows:

.1 *the Mediterranean Sea area* means the Mediterranean Sea proper including the gulfs and seas therein with the boundary between the Mediterranean and the Black Sea constituted by the 41° N parallel and bounded to the west by the Straits of Gibraltar at the meridian of 005°36' W;

.2 *the Baltic Sea area* means the Baltic Sea proper with the Gulf of Bothnia, the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at 57°44.8' N;

.3 *the Black Sea area* means the Black Sea proper with the boundary between the Mediterranean Sea and the Black Sea constituted by the parallel 41° N;

.4 *the Red Sea area* means the Red Sea proper including the Gulfs of Suez and Aqaba bounded at the south by the rhumb line between Ras si Ane (12°28.5' N, 043°19.6' E) and Husn Murad (12°40.4' N, 043°30.2' E);

.5 *the Gulfs area* means the sea area located north-west of the rhumb line between Ras al Hadd (22°30' N, 059°48' E) and Ras al Fasteh (25°04' N, 061° 25' E);

.6 *the Gulf of Aden area* means that part of the Gulf of Aden between the Red Sea and the Arabian Sea bounded to the west by the rhumb line between Ras si Ane (12°28.5'N, 043°19.6' E) and Husn Murad (12°40.4' N, 043°30.2' E) and to the east by the rhumb line between Ras Asir (11°50' N, 051°16.9' E) and the Ras Fartak (15°35' N, 052°13.8' E);

.7 *the Antarctic area* means the sea area south of latitude 60°S; and

.8 *the North West European waters* include the North Sea and its approaches, the Irish Sea and its approaches, the Celtic Sea, the English Channel and its approaches and part of the North East Atlantic immediately to the west of Ireland. The area is bounded by lines joining the following points:

48° 27' N on the French coast
48° 27' N; 006° 25' W
49° 52' N; 007° 44’ W
50° 30' N; 012° W
56° 30' N; 012° W
62° N; 003° W
62° N on the Norwegian coast
57° 44.8' N on the Danish and Swedish coasts

.9 *the Oman area of the Arabian Sea* means the sea area enclosed by the following coordinates:

22° 30.00' N; 059° 48.00' E
23° 47.27' N; 060° 35.73' E
22° 40.62' N; 062° 25.29' E
21° 47.40' N; 063° 22.22' E
20° 30.37' N; 062° 52.41' E
19° 45.90' N; 062° 25.97' E
18° 49.92' N; 062° 02.94' E
17° 44.36' N; 061° 05.53' E
16° 43.71' N; 060° 25.62' E
16° 03.90' N; 059° 32.24' E
15° 15.20' N; 058° 58.52' E
14° 36.93' N; 058° 10.23' E
14° 18.93' N; 057° 27.03' E
14° 11.53' N; 056° 53.75' E
13° 53.80' N; 056° 19.24' E

13° 45.86' N; 055° 54.53' E
14° 27.38' N; 054° 51.42' E
14° 40.10' N; 054° 27.35'E
14° 46.21' N; 054° 08.56' E
15° 20.74' N; 053° 38.33' E
15° 48.69' N; 053° 32.07' E
16° 23.02' N; 053° 14.82' E
16° 39.06' N; 053° 06.52' E

12 *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.

13 *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.

14 *Wing tank* means any tank adjacent to the side shell plating.

15 *Centre tank* means any tank inboard of a longitudinal bulkhead.

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

17 *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.

18 *Segregated ballast* means the ballast water introduced into a tank which is completely separated from the cargo oil and oil fuel system and which is permanently allocated to the carriage of ballast or to the carriage of ballast or cargoes other than oil or noxious liquid substances as variously defined in the Annexes of the present Convention.

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

20 *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.

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

22 *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.

23 *Deadweight (DW)* means the difference in tonnes between the displacement of a ship in water of a relative density of 1.025 at the load waterline corresponding to the assigned summer freeboard and the lightweight of the ship.

24 *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.

25 *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.

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

27 *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.

28.1 *ship delivered on or before 31 December 1979* means a ship:

.1 for which the building contract is placed on or before 31 December 1975; or

.2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or before 30 June 1976; or

.3 the delivery of which is on or before 31 December 1979; or

.4 which has undergone a major conversion:

.1 for which the contract is placed on or before 31 December 1975; or

.2 in the absence of a contract, the construction work of which is begun on or before 30 June 1976; or

.3 which is completed on or before 31 December 1979.

28.2 *ship delivered after 31 December 1979* means a ship:

.1 for which the building contract is placed after 31 December 1975; or

.2 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

.3 the delivery of which is after 31 December 1979; or

.4 which has undergone a major conversion:

.1 for which the contract is placed after 31 December 1975; or

.2 in the absence of a contract, the construction work of which is begun after 30 June 1976; or

.3 which is completed after 31 December 1979.

28.3 *oil tanker delivered on or before 1 June 1982* means an oil tanker:

.1 for which the building contract is placed on or before 1 June 1979; or

.2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or before 1 January 1980; or

.3 the delivery of which is on or before 1 June 1982; or

.4 which has undergone a major conversion:

.1 for which the contract is placed on or before 1 June 1979; or

.2 in the absence of a contract, the construction work of which is begun on or before 1 January 1980; or

.3 which is completed on or before 1 June 1982

28.4 *oil tanker delivered after 1 June 1982* means an oil tanker:

.1 for which the building contract is placed after 1 June 1979; or

.2 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

.3 the delivery of which is after 1 June 1982; or

.4 which has undergone a major conversion:

.1 for which the contract is placed after 1 June 1979; or

.2 in the absence of a contract, the construction work of which is begun after 1 January 1980; or

.3 which is completed after 1 June 1982.

28.5 *oil tanker delivered before 6 July 1996* means an oil tanker:

.1 for which the building contract is placed before 6 July 1993; or

.2 in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction before 6 January 1994; or

.3 the delivery of which is before 6 July 1996; or

.4 which has undergone a major conversion:

.1 for which the contract is placed before 6 July 1993; or

.2 in the absence of a contract, the construction work of which is begun before 6 January 1994; or

.3 which is completed before 6 July 1996.

28.6 *oil tanker delivered on or after 6 July 1996* means an oil tanker:

.1 for which the building contract is placed on or after 6 July 1993; or

.2 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 6 January 1994; or

.3 the delivery of which is on or after 6 July 1996; or

.4 which has undergone a major conversion:

.1 for which the contract is placed on or after 6 July 1993; or

.2 in the absence of a contract, the construction work of which is begun on or after 6 January 1994; or

.3 which is completed on or after 6 July 1996.

28.7 *oil tanker delivered on or after 1 February 2002* means an oil tanker:

.1 for which the building contract is placed on or after 1 February 1999; or

.2 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 1 August 1999; or

.3 the delivery of which is on or after 1 February 2002; or

.4 which has undergone a major conversion:

.1 for which the contract is placed on or after 1 February 1999; or

.2 in the absence of a contract, the construction work of which is begun on or after 1 August 1999; or

.3 which is completed on or after 1 February 2002.

28.8 *oil tanker delivered on or after* 1 January 2010 means an oil tanker:

.1 for which the building contract is placed on or after 1 January 2007; or

.2 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 1 July 2007; or

.3 the delivery of which is on or after 1 January 2010; or

.4 which has undergone a major conversion:

.1 for which the contract is placed on or after 1 January 2007; or

.2 in the absence of a contract, the construction work of which is begun on or after 1 July 2007; or

.3 which is completed on or after 1 January 2010.

29 *Parts per million (ppm)* means parts of oil per million parts of water by volume.

30 *Constructed* means a ship the keel of which is laid or which is at a similar stage of construction.

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 16, 26.4, 29, 30, 31, 32, 34 and 36 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 34.6 of this Annex may apply in lieu of regulations 29, 31 and 32.

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 The requirements of regulations 29, 31 and 32 of this Annex 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 34 of this Annex shall be effected by the retention of residues on board with discharge of all contaminated washings to reception facilities.

5 Subject to the provisions of paragraph 6 of this regulation, regulations 18.6 to 18.8 of this Annex shall not apply to an oil tanker delivered on or before 1 June 1982, as defined in regulation 1.28.3, solely engaged in specific trades between:

.1 ports or terminals within a State Party to the present Convention; or

.2 ports or terminals of States Parties to the present Convention, where:

.1 the voyage is entirely within a Special Area; or

.2 the voyage is entirely within other limits designated by the Organization.

6 The provisions of paragraph 5 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:

.1 subject to the exceptions provided for in regulation 4 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 Part II referred to in regulation 36 of this Annex is endorsed by the competent Port State Authority;

.2 agreement has been reached between the Administration and the Governments of the Port States referred to in paragraphs 5.1 or 5.2 of this regulation concerning the use of an oil tanker delivered on or before 1 June 1982, as defined in regulation 1.28.3, for a specific trade;

.3 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

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

Regulation 3
Exemptions and waivers

1 Any ship such as hydrofoil, air-cushion vehicle, near-surface craft and submarine craft etc. whose constructional features are such as to render the application of any of the provisions of chapters 3 and 4 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.

2 Particulars of any such exemption granted by the Administration shall be indicated in the Certificate referred to in regulation 7 of this Annex.

3 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 therefore, which the Organization shall circulate to the Parties to the present Convention for their information and appropriate action, if any.

4 The Administration may waive the requirements of regulations 29, 31 and 32 of this Annex, for any oil tanker which engages exclusively on voyages both of 72 hours or less in duration and within 50 nautical 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.

5 The Administration may waive the requirements of regulations 31 and 32 of this Annex for oil tankers other than those referred to in paragraph 4 of this regulation in cases where:

.1 the tanker is an oil tanker delivered on or before 1 June 1982, as defined in regulation 1.28.3, of 40,000 tonnes deadweight or above, as referred to in regulation 2.5 of this Annex, solely engaged in specific trades, and the conditions specified in regulation 2.6 of this Annex are complied with; or

.2 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 nautical miles from the nearest land outside special areas where the tanker is engaged in:

.1 trades between ports or terminals of a State Party to the present Convention; or

.2 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 paragraph 5.2.2 of this regulation, 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 paragraphs 5.2.1 and 5.2.2.2 of this regulation; and

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

Regulation 4
Exceptions

Regulations 15 and 34 of this Annex shall not apply to:

.1 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

.2 the discharge into the sea of oil or oily mixture resulting from damage to a ship or its equipment:

.1 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

.2 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

.3 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 5
Equivalents

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 to be fitted in a ship as an alternative to that required by this Annex shall communicate particulars thereof to the Organization for circulation to the Parties to the Convention for their information and appropriate action, if any.

CHAPTER 2 - SURVEYS AND CERTIFICATION

Regulation 6
Surveys

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

.1 an initial survey before the ship is put in service or before the Certificate required under regulation 7 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;

.2 a renewal survey at intervals specified by the Administration, but not exceeding 5 years, except where regulation 10.2.2, 10.5, 10.6 or 10.7 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;

.3 an intermediate survey within 3 months before or after the second anniversary date or within 3 months before or after the third anniversary date of the Certificate which shall take the place of one of the annual surveys specified in paragraph 1.4 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 7 or 8 of this Annex;

.4 an annual survey within 3 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 1.1 of this regulation to ensure that they have been maintained in accordance with paragraphs 4.1 and 4.2 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 7 or 8 of this Annex; and

.5 an additional survey either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in paragraph 4.3 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.

3.1 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. Such organizations shall comply with the guidelines adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the specifications adopted by the Organization by resolution A.789(19), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to this Annex.

3.2 An Administration nominating surveyors or recognizing organizations to conduct surveys as set forth in paragraph 3.1 of this regulation shall, as a minimum, empower any nominated surveyor or recognized organization to:

.1 require repairs to a ship; and

.2 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 Convention for the information of their officers.

3.3 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 shall 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.

3.4 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.

4.1 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.

4.2 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.

4.3 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 7
Issue or endorsement of certificate

1 An International Oil Pollution Prevention Certificate shall be issued, after an initial or renewal survey in accordance with the provisions of regulation 6 of this Annex, to any oil tanker of 150 gross tonnage and above and any other ships of 400 gross tonnage and above which are engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the present Convention.

2 Such certificate shall be issued or endorsed as appropriate 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 8
Issue or endorsement of certificate by another Government

1 The Government of a Party to the present 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 7 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 9
Form of certificate

The International Oil Pollution Prevention Certificate shall be drawn up in the form corresponding to the model given in appendix II to this Annex and shall be at least in English, French or Spanish. If an official language of the issuing country is also used, this shall prevail in case of a dispute or discrepancy.

Regulation 10
Duration and validity of certificate

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

2.1 Notwithstanding the requirements of paragraph 1 of this regulation, when the renewal survey is completed within 3 months before the expiry date of the existing certificate, the new certificate shall be valid from the date of completion of the renewal survey to a date not exceeding 5 years from the date of expiry of the existing certificate.

2.2 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 5 years from the date of expiry of the existing certificate.

2.3 When the renewal survey is completed more than 3 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 5 years from the date of completion of the renewal survey.

3 If a certificate is issued for a period of less than 5 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 regulations 6.1.3 and 6.1.4 of this Annex applicable when a certificate is issued for a period of 5 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 5 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 3 months, and a ship to which an extension is granted shall not, on its arrival in the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port without having a new certificate. When the renewal survey is completed, the new certificate shall be valid to a date not exceeding 5 years from the date of expiry of the existing certificate before the extension was granted.

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 5 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 paragraphs 2.2, 5 or 6 of this regulation. In these special circumstances, the new certificate shall be valid to a date not exceeding 5 years from the date of completion of the renewal survey.

8 If an annual or intermediate survey is completed before the period specified in regulation 6 of this Annex, then:

.1 the anniversary date shown on the certificate shall be amended by endorsement to a date which shall not be more than 3 months later than the date on which the survey was completed;

.2 the subsequent annual or intermediate survey required by regulation 6.1 of this Annex shall be completed at the intervals prescribed by that regulation using the new anniversary date; and

.3 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 6.1 of this Annex are not exceeded.

9 A certificate issued under regulation 7 or 8 of this Annex shall cease to be valid in any of the following cases:

.1 if the relevant surveys are not completed within the periods specified under regulation 6.1 of this Annex;

.2 if the certificate is not endorsed in accordance with regulation 6.1.3 or 6.1.4 of this Annex; or

.3 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 regulations 6.4.1 and 6.4.2 of this Annex. In the case of a transfer between Parties, if requested within 3 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.

Regulation 11

Port State control on operational requirements[*]

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 have 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.

[*] Refer to the Procedures for port State control, adopted by the Organization by resolution A.787(19) as amended by resolution A.882(21); see IMO publication, sales No. IMO-650E.

CHAPTER 3 - REQUIREMENTS FOR MACHINERY SPACES OF ALL SHIPS

PART A CONSTRUCTION

Regulation 12
Tanks for oil residues (sludge)

1 Every ship of 400 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.

2 Piping to and from sludge tanks shall have no direct connection overboard, other than the standard discharge connection referred to in regulation 13.

3 In ships delivered after 31 December 1979, as defined in regulation 1.28.2, tanks for oil residues shall be designed and constructed so as to facilitate their cleaning and the discharge of residues to reception facilities. Ships delivered on or before 31 December 1979, as defined in regulation 1.28.1, shall comply with this requirement as far as is reasonable and practicable.

Regulation 13
Standard discharge connection

To enable pipes of reception facilities to be connected with the ship's discharge pipeline for residues from machinery bilges and from sludge tanks, 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 600 kPa.	

PART B EQUIPMENT

Regulation 14
Oil filtering equipment

1 Except as specified in paragraph 3 of this regulation any ship of 400 gross tonnage and above but less than 10,000 gross tonnage shall be fitted with oil filtering equipment complying with paragraph 6 of this regulation. Any such ship which may discharge into the sea ballast water retained in fuel oil tanks in accordance with regulation 16.2 shall comply with paragraph 2 of this regulation.

2 Except as specified in paragraph 3 of this regulation any ship of 10,000 gross tonnage and above shall be fitted with oil filtering equipment complying with paragraph 7 of this regulation.

3 Ships, such as hotel ships, storage vessels, etc., which are stationary except for non-cargo-carrying relocation voyages need not be provided with oil filtering equipment. Such ships shall be provided 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. All oily bilge water shall be retained on board for subsequent discharge to reception facilities.

4 The Administration shall ensure that ships of less than 400 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 15.6 of this Annex.

5 The Administration may waive the requirements of paragraphs 1 and 2 of this regulation for:

.1 any ship engaged exclusively on voyages within special areas, or

.2 any ship certified under the International Code of Safety for High-Speed Craft (or otherwise within the scope of this Code with regard to size and design) engaged on a scheduled service with a turn-around time not exceeding 24 hours and covering also non-passenger/cargo-carrying relocation voyages for these ships,

.3 with regard to the provision of subparagraphs .1 and .2 above, the following conditions shall be 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;

.2 all oily bilge water is retained on board for subsequent discharge to reception facilities;

.3 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;

.4 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 or has been accepted as a high-speed craft for the purpose of this regulation and the service is identified; and

.5 the quantity, time, and port of the discharge are recorded in the Oil Record Book Part I.

6 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.*

7 Oil filtering equipment referred to in paragraph 2 of this regulation shall comply with paragraph 6 of this regulation. In addition, it shall be provided with alarm arrangement to indicate when this level cannot be maintained. The system shall also be provided with arrangements to 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 approvals, the Administration shall have regard to the specification recommended by the Organization.*

PART C CONTROL OF OPERATIONAL DISCHARGE OF OIL

Regulation 15
Control of discharge of oil

1 Subject to the provisions of regulation 4 of this annex and paragraphs 2, 3, and 6 of this regulation, any discharge into the sea of oil or oily mixtures from ships shall be prohibited.

A. Discharges outside special areas

2 Any discharge into the sea of oil or oily mixtures from ships of 400 gross tonnage and above shall be prohibited except when all the following conditions are satisfied:

.1 the ship is proceeding en route;

.2 the oily mixture is processed through an oil filtering equipment meeting the requirements of regulation 14 of this Annex;

.3 the oil content of the effluent without dilution does not exceed 15 parts per million;

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* Refer to the Recommendation on International Performance and Test Specification for Oily-Water Separating Equipment and Oil Content Meters, adopted by the Organization by Assembly resolution A.393(X), or the Guidelines and specifications for Pollution Prevention equipment for Machinery space Bilges of Ships, adopted by the Marine Environment Protection Committee by resolution MEPC.60(33), or the revised guidelines and specification for pollution prevention equipment for machinery space bilges of ships, adopted by the Marine Environment Protection Committee by resolution MEPC.107(49).

.4 the oily mixture does not originate from cargo pump room bilges on oil tankers; and

.5 the oily mixture, in case of oil tankers, is not mixed with oil cargo residues.

B. Discharges in special areas

3 Any discharge into the sea of oil or oily mixtures from ships of 400 gross tonnage and above shall be prohibited except when all of the following conditions are satisfied:

.1 the ship is proceeding en route;

.2 the oily mixture is processed through an oil filtering equipment meeting the requirements of regulation 14.7 of this Annex;

.3 the oil content of the effluent without dilution does not exceed 15 parts per million;

.4 the oily mixture does not originate from cargo pump room bilges on oil tankers; and

.5 the oily mixture, in case of oil tankers, is not mixed with oil cargo residues.

4 In respect of the Antarctic area, any discharge into the sea of oil or oily mixtures from any ship shall be prohibited.

5 Nothing in this regulation shall prohibit a ship on a voyage only part of which is in a special area from discharging outside a special area in accordance with paragraphs 2 of this regulation.

C. Requirements for ships of less than 400 gross tonnage in all areas except the Antarctic area

6 In the case of a ship of less than 400 gross tonnage, oil and all oily mixtures shall either be retained on board for subsequent discharge to reception facilities or discharged into the sea in accordance with the following provisions :

.1 the ship is proceeding en route;

.2 the ship has in operation equipment of a design approved by the Administration that ensures that the oil content of the effluent without dilution does not exceed 15 parts per million;

.3 the oily mixture does not originate from cargo pump room bilges on oil tankers; and

.4 the oily mixture, in case of oil tankers, is not mixed with oil cargo residues.

D. General requirements

7 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 present 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. 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.

8 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.

9 The oil residues which cannot be discharged into the sea in compliance with this regulation shall be retained on board for subsequent discharge to reception facilities.

Regulation 16
Segregation of oil and water ballast and carriage of oil in forepeak tanks

1 Except as provided in paragraph 2 of this regulation, in ships delivered after 31 December 1979, as defined in regulation 1.28.2, of 4,000 gross tonnage and above other than oil tankers, and in oil tankers delivered after 31 December 1979, as defined in regulation 1.28.2, of 150 gross tonnage and above, no ballast water shall be carried in any oil fuel tank.

2 Where 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 15 of this Annex using the equipment specified in regulation 14.2 of this Annex, and an entry shall be made in the Oil Record Book to this effect.

3 In a ship of 400 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.

4 All ships other than those subject to paragraphs 1 and 3 of this regulation shall comply with the provisions of those paragraphs as far as is reasonable and practicable.

Regulation 17
Oil Record Book, Part I - Machinery space operations

1 Every oil tanker of 150 gross tonnage and above and every ship of 400 gross tonnage and above other than an oil tanker shall be provided with an Oil Record Book Part I (Machinery Space Operations). The Oil Record Book, whether as a part of the ship’s official log-book or otherwise, shall be in the Form specified in appendix III to this Annex.

2 The Oil Record Book Part I shall be completed on each occasion, on a tank-to-tank basis if appropriate, whenever any of the following machinery space operations takes place in the ship:

.1 ballasting or cleaning of oil fuel tanks;

.2 discharge of dirty ballast or cleaning water from oil fuel tanks;

.3 collection and disposal of oil residues (sludge and other oil residues);

.4 discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces; and

.5 bunkering of fuel or bulk lubricating oil.

3 In the event of such discharge of oil or oily mixture as is referred to in regulation 4 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 Part I 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 Part I, 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 Part I, for ships holding an International Oil Pollution Prevention Certificate, shall be at least in English, French or Spanish. Where entries in an official national language of the State whose flag the ship is entitled to fly are also used, this shall prevail in case of a dispute or discrepancy.

5 Any failure of the oil filtering equipment shall be recorded in the Oil Record Book Part I.

6 The Oil Record Book Part I, 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.

7 The competent authority of the Government of a Party to the present Convention may inspect the Oil Record Book Part I 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 Part I shall be made admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of an Oil Record Book Part I 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.

CHAPTER 4 - REQUIREMENTS FOR THE CARGO AREA OF OIL TANKERS

PART A CONSTRUCTION

Regulation 18
Segregated Ballast Tanks

Oil tankers of 20,000 tonnes deadweight and above delivered after 1 June 1982

1 Every crude oil tanker of 20,000 tonnes deadweight and above and every product carrier of 30,000 tonnes deadweight and above delivered after 1 June 1982, as defined in regulation 1.28.4, shall be provided with segregated ballast tanks and shall comply with paragraphs 2, 3 and 4, or 5 as appropriate, of this regulation.

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

.1 the moulded draught amidships (d_m) in metres (without taking into account any ship's deformation) shall not be less than:

$$d_m = 2.0 + 0.02L$$

.2 the draughts at the forward and after perpendiculars shall correspond to those determined by the draught amidships (dm) as specified in paragraph 2.1 of this regulation, in association with the trim by the stern of not greater than 0.015L; and

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

3 In no case shall ballast water be carried in cargo tanks, except:

.1 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

.2 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 34 of this Annex and an entry shall be made in the Oil Record Book Part II referred to in regulation 36 of this Annex.

4 In the case of 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 35 of this Annex before departure from an oil unloading port or terminal.

5 Notwithstanding the provisions of paragraph 2 of this regulation the segregated ballast conditions for oil tankers less than 150 metres in length shall be to the satisfaction of the Administration.

Crude oil tankers of 40,000 tonnes deadweight and above delivered on or before 1 June 1982

6 Subject to the provisions of paragraph 7 of this regulation every crude oil tanker of 40,000 tonnes deadweight and above delivered on or before 1 June 1982, as defined in regulation 1.28.3, shall be provided with segregated ballast tanks and shall comply with the requirements of paragraphs 2 and 3 of this regulation.

7 Crude oil tankers referred to in paragraph 6 of this regulation may, in lieu of being provided with segregated tanks operate with a cargo tank cleaning procedure using crude oil washing in accordance with regulation 33 and 35 of this Annex unless the crude oil tanker is intended to carry crude oil which is not suitable for crude oil washing.

Product carriers of 40,000 tonnes deadweight and above delivered on or before 1 June 1982

8 Every product carrier of 40,000 tonnes deadweight and above delivered on or before 1 June 1982, as defined in regulation 1.28.3, 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 following provisions:

.1 The product carrier shall have adequate tank capacity, dedicated solely to the carriage of clean ballast as defined in regulation 1.17 of this Annex, to meet the requirements of paragraphs 2 and 3 of this regulation.

.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 revised Specifications for Oil Tankers with Dedicated Clean Ballast Tanks adopted by the Organization by resolution A.495(XII).

.3 The product carrier 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.*

* 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 on 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). For oil content meters installed on oil tankers the keels of which are laid, or which are at a similar stage of construction, on or after 1 January 2005, refer to the Revised Guidelines and specifications adopted by the Organization by resolution MEPC.108(49).

.4 Every product carrier 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 subparagraph 8.2 of this regulation. If an alteration affecting the dedicated clean ballast tank system is made, the Operation Manual shall be revised accordingly.

An oil tanker qualified as a segregated ballast oil tanker

9 Any oil tanker which is not required to be provided with segregated ballast tanks in accordance with paragraphs 1, 6 or 8 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 5 as appropriate, of this regulation.

Oil tankers delivered on or before 1 June 1982 having special ballast arrangements

10 Oil tankers delivered on or before 1 June 1982, as defined in regulation 1.28.3, having special ballast arrangements.

.1 Where an oil tanker delivered on or before 1 June 1982, as defined in regulation 1.28.3, is so constructed or operates in such a manner that it complies at all times with the draught and trim requirements set out in paragraph 2 of this regulation without recourse to the use of ballast water, it shall be deemed to comply with the segregated ballast tank requirements referred to in paragraph 6 of this regulation, provided that all of the following conditions are complied with:

.1 operational procedures and ballast arrangements are approved by the Administration;

.2 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

.3 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 34 of this Annex and in accordance with the requirements of regulations 29, 31 and 32 of this Annex, and entry shall be made in the Oil Record Book referred to in regulation 36 of this Annex.

.3 An Administration which has endorsed a Certificate in accordance with subparagraph 10.1.3 of this regulation shall communicate to the Organization the particulars thereof for circulation to the Parties to the present Convention.

† See resolution A.495(XII) for the standard format of the Manual.

Oil tankers of 70,000 tonnes deadweight and above delivered after 31 December 1979

11 Oil tankers of 70,000 tonnes deadweight and above delivered after 31 December 1979, as defined in regulation 1.28.2, shall be provided with segregated ballast tanks and shall comply with paragraphs 2, 3 and 4 or paragraph 5 as appropriate of this regulation.

Protective location of segregated ballast

12 Protective location of segregated ballast spaces.

In every crude oil tanker of 20,000 tonnes deadweight and above and every product carrier of 30,000 tonnes deadweight and above delivered after 1 June 1982, as defined in regulation 1.28.4, except those tankers that meet regulation 19, the segregated ballast tanks required to provide the capacity to comply with the requirements of paragraph 2 of this regulation, which are located within the cargo tank length, shall be arranged in accordance with the requirements of paragraphs 13, 14 and 15 of this regulation to provide a measure of protection against oil outflow in the event of grounding or collision.

13 Segregated ballast tanks and spaces other than oil tanks within the cargo tanks length (L_t) shall be so arranged as to comply with the following requirement:

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

where: PA_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,

PA_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 1.22 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 tonnes deadweight, 0.30 for oil tankers of 200,000 tonnes deadweight and above, subject to the provisions of paragraph 14 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.

14 For tankers of 200,000 tonnes deadweight and above the value of J may be reduced as follows:

$$J_{reduced} = \left[J - \left(a - \frac{O_C + O_S}{4 O_A} \right) \right]$$ or 0.2 whichever is greater

where: *a* = 0.25 for oil tankers of 200,000 tonnes deadweight,
a = 0.40 for oil tankers of 300,000 tonnes deadweight,
a = 0.50 for oil tankers of 420,000 tonnes deadweight and above.

For intermediate values of deadweight the value of *a* shall be determined by linear interpolation.

O_c = as defined in regulation 25.1.1 of this Annex,
O_s = as defined in regulation 25.1.2 of this Annex,
O_A = the allowable oil outflow as required by regulation 26.2 of this Annex.

15 In the determination of PA_c and PA_s for segregated ballast tanks and spaces other than oil tanks the following shall apply:

.1 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

.2 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 19

Double hull and double bottom requirements for oil tankers delivered on or after 6 July 1996

1 This regulation shall apply to oil tankers of 600 tonnes deadweight and above delivered on or after 6 July 1996, as defined in regulation 1.28.6, as follows:

2 Every oil tanker of 5,000 tonnes deadweight and above shall:

.1 in lieu of paragraphs 12 to 15 of regulation 18, as applicable, comply with the requirements of paragraph 3 of this regulation unless it is subject to the provisions of paragraphs 4 and 5 of this regulation; and

.2 comply, if applicable, with the requirements of regulation 28.6.

3 The entire cargo tank length shall be protected by ballast tanks or spaces other than tanks that carry oil as follows:

.1 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.

.2 Double bottom tanks or spaces

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

h = B/15 (m) or
h = 2.0 m, whichever is the lesser.

The minimum value of h = 1.0 m.

.3 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.

.4 The aggregate capacity of ballast tanks

On crude oil tankers of 20,000 tonnes deadweight and above and product carriers of 30,000 tonnes deadweight and above, the aggregate capacity of wing tanks, double bottom tanks, forepeak tanks and after peak tanks shall not be less than the capacity of segregated ballast tanks necessary to meet the requirements of regulation 18 of this Annex. Wing tanks or spaces and double bottom tanks used to meet the requirements of regulation 18 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.

.5 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.

.6 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 The following applies for double bottom tanks or spaces:

.1 Double bottom tanks or spaces as required by paragraph 3.2 of this regulation may be dispensed with, provided that the design of the tanker is such that the cargo and vapour pressure exerted on the bottom shell plating forming a single boundary between the cargo and the sea does not exceed the external hydrostatic water pressure, as expressed by the following formula:

$$f \times h_c \times \rho_c \times g + p \leq d_n \times \rho_s \times g$$

where:

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

ρ_c = maximum cargo density in kg/m^3

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

ρ_s = density of seawater in kg/m^3

p = maximum set pressure above atmospheric pressure (gauge pressure) of pressure/vacuum valve provided for the cargo tank in Pa

f = safety factor = 1.1

g = standard acceleration of gravity (9.81 m/s^2)

.2 Any horizontal partition necessary to fulfil the above requirements shall be located at a height 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.

.3 The location of wing tanks or spaces shall be as defined in paragraph 3.1 of this regulation except that, below a level 1.5 h above the baseline where h is as defined in paragraph 3.2 of this regulation, 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 of this regulation, provided that such methods ensure at least the same level of protection against oil pollution in the event of collision or stranding and are approved in principle by the Marine Environment Protection Committee based on guidelines developed by the Organization[*].

6 Every oil tanker of less than 5,000 tonnes deadweight shall comply with paragraphs 3 and 4 of this regulation, or shall:

.1 at least be fitted with double bottom tanks or spaces having such a depth that the distance h specified in paragraph 3.2 of this regulation, complies with the following:

h = B/15 (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

.2 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 3.1 of this regulation, complying with the following:

$$w = 0.4 + \frac{2.4DW}{20000}(m)$$ with a minimum value of w = 0.76 m.

7 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.

8 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.

[*] Refer to the Revised Interim Guidelines for the approval of alternative methods of design and construction of oil tankers adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.110(49).

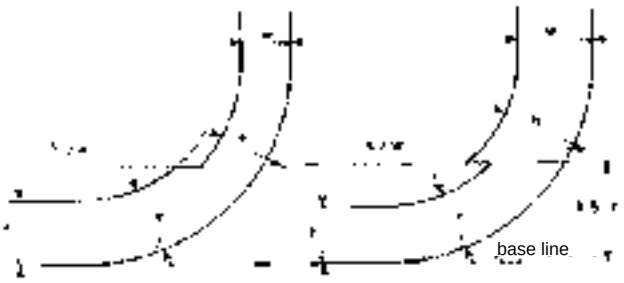

Figure 1 - ***Cargo tank boundary lines for the purpose of paragraph 3***

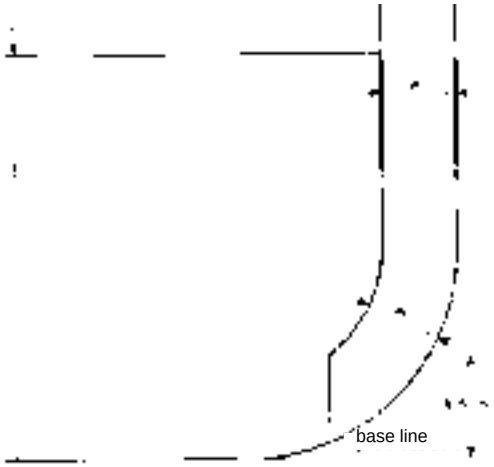

Figure 2 - ***Cargo tank boundary lines for the purpose of paragraph 4***

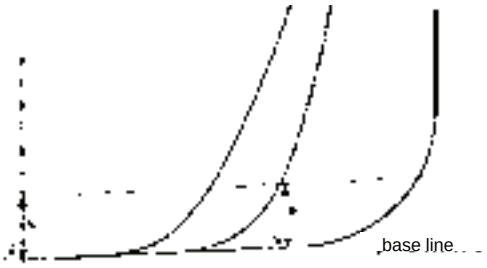

Figure 3 - ***Cargo tank boundary lines for the purpose of paragraph 6***

Regulation 20
Double hull and double bottom requirements for oil tankers delivered before 6 July 1996

1 Unless expressly provided otherwise this regulation shall:

.1 apply to oil tankers of 5,000 tonnes deadweight and above, which are delivered before 6 July 1996, as defined in regulation 1.28.5 of this Annex; and

.2 not apply to oil tankers complying with regulation 19 and regulation 28 in respect of paragraph 28.6, which are delivered before 6 July 1996, as defined in regulation 1.28.5 of this Annex; and

.3 not apply to oil tankers covered by subparagraph 1 above which comply with regulation 19.3.1 and 19.3.2 or 19.4 or 19.5 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 at centreline shall comply with regulation 18.15.2 of this Annex.

2 For the purpose of this regulation:

.1 "Heavy diesel oil" means diesel oil other than those distillates of which more than 50 per cent by volume distils at a temperature not exceeding 340ºC when tested by the method acceptable to the Organization[1].

.2 "Fuel oil" means heavy distillates or residues from crude oil or blends of such materials intended for use as a fuel for the production of heat or power of a quality equivalent to the specification acceptable to the Organization[2].

3 For the purpose of this regulation, oil tankers are divided into the following categories:

.1 "Category 1 oil tanker" means an oil tanker of 20,000 tonnes deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tonnes deadweight and above carrying oil other than the above, which does not comply with the requirements for oil tankers delivered after 1 June 1982, as defined in regulation 1.28.4 of this Annex;

.2 "Category 2 oil tanker" means an oil tanker of 20,000 tonnes deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tonnes deadweight and above carrying oil other than the above, which complies with the requirements for oil tankers delivered after 1 June 1982, as defined in regulation 1.28.4 of this Annex; and

.3 "Category 3 oil tanker" means an oil tanker of 5,000 tonnes deadweight and above but less than that specified in subparagraph 1 or 2 of this paragraph.

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[1] Refer to the American Society for Testing and Material's Standard Test Method (Designation D86).

[2] Refer to the American Society for Testing and Material's Specification for Number Four Fuel Oil (Designation D396) or heavier.

4 An oil tanker to which this regulation applies shall comply with the requirements of paragraphs 2 to 5, 7 and 8 of regulation 19 and regulation 28 in respect of paragraph 28.6 of this Annex not later than 5 April 2005 or the anniversary of the date of delivery of the ship on the date or in the year specified in the following table:

Category of oil tanker	**Date or year**
Category 1	5 April 2005 for ships delivered on 5 April 1982 or earlier 2005 for ships delivered after 5 April 1982
Category 2 and Category 3	5 April 2005 for ships delivered on 5 April 1977 or earlier 2005 for ships delivered after 5 April 1977 but before 1 January 1978 2006 for ships delivered in 1978 and 1979 2007 for ships delivered in 1980 and 1981 2008 for ships delivered in 1982 2009 for ships delivered in 1983 2010 for ships delivered in 1984 or later

5 Notwithstanding the provisions of paragraph 4 of this regulation, in the case of a Category 2 or 3 oil tanker fitted with only double bottoms or double sides not used for the carriage of oil and extending to the entire cargo tank length or double hull spaces which are not used for the carriage of oil and extend to the entire cargo tank length, but which does not fulfil conditions for being exempted from the provisions of paragraph 1.3 of this regulation, the Administration may allow continued operation of such a ship beyond the date specified in paragraph 4 of this regulation, provided that:

.1 the ship was in service on 1 July 2001;

.2 the Administration is satisfied by verification of the official records that the ship complied with the conditions specified above;

.3 the conditions of the ship specified above remain unchanged; and

.4 such continued operation does not go beyond the date on which the ship reaches 25 years after the date of its delivery.

6 A Category 2 or 3 oil tanker of 15 years and over after the date of its delivery shall comply with the Condition Assessment Scheme adopted by the Marine Environment Protection Committee by resolution MEPC.94(46), as amended, provided that such amendments shall be adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention relating to amendment procedures applicable to an appendix to an Annex.

7 The Administration may allow continued operation of a Category 2 or 3 oil tanker beyond the date specified in paragraph 4 of this regulation, if satisfactory results of the Condition Assessment Scheme warrant that, in the opinion of the Administration, the ship is fit to continue such operation, provided that the operation shall not go beyond the anniversary of the date of delivery of the ship in 2015 or the date on which the ship reaches 25 years after the date of its delivery, whichever is the earlier date.

8 .1 The Administration of a Party to the present Convention which allows the application of paragraph 5 of this regulation, or allows, suspends, withdraws or declines the application of paragraph 7 of this regulation, to a ship entitled to fly its flag shall forthwith communicate to the Organization for circulation to the Parties to the present Convention particulars thereof, for their information and appropriate action, if any.

.2 A Party to the present Convention shall be entitled to deny entry into the ports or offshore terminals under its jurisdiction of oil tankers operating in accordance with the provisions of:

.1 paragraph 5 of this regulation beyond the anniversary of the date of delivery of the ship in 2015; or

.2 paragraph 7 of this regulation.

In such cases, that Party shall communicate to the Organization for circulation to the Parties to the present Convention particulars thereof for their information.

Regulation 21
Prevention of oil pollution from oil tankers carrying heavy grade oil as cargo

1 This regulation shall:

.1 apply to oil tankers of 600 tonnes deadweight and above carrying heavy grade oil as cargo regardless of the date of delivery; and

.2 not apply to oil tankers covered by subparagraph 1 above which comply with regulations 19.3.1 and 19.3.2 or 19.4 or 19.5 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 at centreline shall comply with regulation 18.15.2 of this Annex.

2 For the purpose of this regulation “heavy grade oil” means any of the following:

.1 crude oils having a density at 15ºC higher than 900 kg/m^3;

.2 fuel oils having either a density at 15^{o}C higher than 900 kg/m^3 or a kinematic viscosity at 50^{o}C higher than 180 mm^2/s; or

.3 bitumen, tar and their emulsions.

3 An oil tanker to which this regulation applies shall comply with the provisions of paragraphs 4 to 8 of this regulation in addition to complying with the applicable provisions of regulation 20.

4 Subject to the provisions of paragraphs 5, 6 and 7 of this regulation, an oil tanker to which this regulation applies shall:

.1 if 5,000 tonnes deadweight and above, comply with the requirements of regulation 19 of this Annex not later than 5 April 2005; or

.2 if 600 tonnes deadweight and above but less than 5,000 tonnes deadweight, be fitted with both double bottom tanks or spaces complying with the provisions of regulation 19.6.1 of this Annex, and wing tanks or spaces arranged in accordance with regulation 19.3.1 and complying with the requirement for distance *w* as referred to in regulation 19.6.2, not later than the anniversary of the date of delivery of the ship in the year 2008.

5 In the case of an oil tanker of 5,000 tonnes deadweight and above, carrying heavy grade oil as cargo fitted with only double bottoms or double sides not used for the carriage of oil and extending to the entire cargo tank length or double hull spaces which are not used for the carriage of oil and extend to the entire cargo tank length, but which does not fulfil conditions for being exempted from the provisions of paragraph 1.2 of this regulation, the Administration may allow continued operation of such a ship beyond the date specified in paragraph 4 of this regulation, provided that:

.1 the ship was in service on 4 December 2003;

.2 the Administration is satisfied by verification of the official records that the ship complied with the conditions specified above;

.3 the conditions of the ship specified above remain unchanged; and

.4 such continued operation does not go beyond the date on which the ship reaches 25 years after the date of its delivery.

6 .1 The Administration may allow continued operation of an oil tanker of 5,000 tonnes deadweight and above, carrying crude oil having a density at 15ºC higher than 900 kg/m^3 but lower than 945 kg/m^3, beyond the date specified in paragraph 4.1 of this regulation, if satisfactory results of the Condition Assessment Scheme referred to in regulation 20.6 warrant that, in the opinion of the Administration, the ship is fit to continue such operation, having regard to the size, age, operational area and structural conditions of the ship and provided that the operation shall not go beyond the date on which the ship reaches 25 years after the date of its delivery.

.2 The Administration may allow continued operation of an oil tanker of 600 tonnes deadweight and above but less than 5,000 tonnes deadweight, carrying heavy grade oil as cargo, beyond the date specified in paragraph 4.2 of this regulation, if, in the opinion of the Administration, the ship is fit to continue such operation, having regard to the size, age, operational area and structural conditions of the ship, provided that the operation shall not go beyond the date on which the ship reaches 25 years after the date of its delivery.

7 The Administration of a Party to the present Convention may exempt an oil tanker of 600 tonnes deadweight and above carrying heavy grade oil as cargo from the provisions of this regulation if the oil tanker:

.1 either is engaged in voyages exclusively within an area under its jurisdiction, or operates as a floating storage unit of heavy grade oil located within an area under its jurisdiction; or

.2 either is engaged in voyages exclusively within an area under the jurisdiction of another Party, or operates as a floating storage unit of heavy grade oil located within an area under the jurisdiction of another Party, provided that the Party within whose jurisdiction the oil tanker will be operating agrees to the operation of the oil tanker within an area under its jurisdiction.

8 .1 The Administration of a Party to the present Convention which allows, suspends, withdraws or declines the application of paragraph 5, 6 or 7 of this regulation to a ship entitled to fly its flag shall forthwith communicate to the Organization for circulation to the Parties to the present Convention particulars thereof, for their information and appropriate action, if any.

.2 Subject to the provisions of international law, a Party to the present Convention shall be entitled to deny entry of oil tankers operating in accordance with the provisions of paragraph 5 or 6 of this regulation into the ports or offshore terminals under its jurisdiction, or deny ship-to-ship transfer of heavy grade oil in areas under its jurisdiction except when this is necessary for the purpose of securing the safety of a ship or saving life at sea. In such cases, that Party shall communicate to the Organization for circulation to the Parties to the present Convention particulars thereof for their information.

Regulation 22
Pump-room bottom protection

1 This regulation applies to oil tankers of 5,000 tonnes deadweight and above constructed on or after 1 January 2007.

2 The pump-room shall be provided with a double bottom such that 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 pump-room and the ship's base line measured at right angles to the ship's base line is not less than specified below:

h = B/15(m) or
h = 2 m, whichever is the lesser.

The minimum value of h = 1 m.

3 In case of pump rooms whose bottom plate is located above the base line by at least the minimum height required in paragraph 2 above (e.g. gondola stern designs), there will be no need for a double bottom construction in way of the pump-room.

4 Ballast pumps shall be provided with suitable arrangements to ensure efficient suction from double bottom tanks.

5 Notwithstanding the provisions of paragraphs 2 and 3 above, where the flooding of the pump-room would not render the ballast or cargo pumping system inoperative, a double bottom need not be fitted.

Regulation 23
Accidental oil outflow performance

1 This regulation shall apply to oil tankers delivered on or after 1 January 2010, as defined in regulation 1.28.8.

2 For the purpose of this regulation, the following definitions shall apply:

.1 "Load line draught (d_S)" is the vertical distance, in metres, from the moulded baseline at mid-length to the waterline corresponding to the summer freeboard to be assigned to the ship. Calculations pertaining to this regulation should be based on draught d_S, notwithstanding assigned draughts that may exceed d_S, such as the tropical loadline.

.2 "Waterline (d_B)" is the vertical distance, in metres, from the moulded baseline at mid-length to the waterline corresponding to 30% of the depth D_S.

.3 "Breadth (B_S)" is the greatest moulded breadth of the ship, in metres, at or below the deepest load line d_S.

.4 "Breadth (B_B)" is the greatest moulded breadth of the ship, in metres, at or below the waterline d_B.

.5 "Depth (D_S)" is the moulded depth, in metres, measured at mid-length to the upper deck at side.

.6 "Length (L)" and "deadweight (DW)" are as defined in regulations 1.19 and 1.23, respectively.

3 To provide adequate protection against oil pollution in the event of collision or stranding the following shall be complied with:

.1 for oil tankers of 5,000 tonnes deadweight (DWT) and above, the mean oil outflow parameter shall be as follows:

$O_M \leq 0.015$	for $C \leq 200{,}000\ m^3$
$O_M \leq 0.012 + (0.003/200{,}000)\ (400{,}000\text{-}C)$	for $200{,}000\ m^3 < C < 400{,}000\ m^3$
$O_M \leq 0.012$	for $C \geq 400{,}000\ m^3$

for combination carriers between 5,000 tonnes deadweight (DWT) and 200,000 m^3 capacity, the mean oil outflow parameter may be applied, provided calculations are submitted to the satisfaction of the Administration, demonstrating that after accounting for its increased structural strength, the combination carrier has at least equivalent oil out flow performance to a standard double hull tanker of the same size having a $O_M <= 0.015$.

$O_M \leq 0.021$ for $C \leq 100{,}000\ m^3$

$O_M \leq 0.015 + (0.006/100{,}000)\ (200{,}000\text{-}C)$ for $100{,}000\ m^3 < C \leq 200{,}000\ m^3$

where:
O_M = mean oil outflow parameter.
C = total volume of cargo oil, in m^3, at 98% tank filling

.2 for oil tankers of less than 5,000 tonnes deadweight (DWT) :

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

.1 where no longitudinal bulkhead is provided inside the cargo tanks:

$(0.5\ \frac{b_i}{B} + 0.1)L$ but not to exceed 0.2L

.2 where a centreline longitudinal bulkhead is provided inside the cargo tanks:

$(0.25\frac{b_i}{B} + 0.15)L$

.3 where two or more longitudinal bulkheads are provided inside the cargo tanks:

.1 for wing cargo tanks: 0.2L

.2 for centre cargo tanks:

.1 if $\frac{b_i}{B} \geq 0.2L$: 0.2L

.2 if $\frac{b_i}{B}$ is < 0.2:

- where no centreline longitudinal bulkhead is provided:

$(0.5\ \frac{b_i}{B} + 0.1)\ L$

- where a centreline longitudinal bulkhead is provided:

$(0.25\frac{b_i}{B} + 0.15)\ L$

.4 b_i 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.

4 The following general assumptions shall apply when calculating the mean oil outflow parameter:

.1 The cargo block length extends between the forward and aft extremities of all tanks arranged for the carriage of cargo oil, including slop tanks.

.2 Where this regulation refers to cargo tanks, it shall be understood to include all cargo tanks, slop tanks and fuel tanks located within the cargo block length.

.3 The ship shall be assumed loaded to the load line draught d_S without trim or heel.

.4 All cargo oil tanks shall be assumed loaded to 98% of their volumetric capacity. The nominal density of the cargo oil (ρ_n) shall be calculated as follows:

$$\rho_n = 1000\ (DWT)/C\ (kg/m^3)$$

.5 For the purposes of these outflow calculations, the permeability of each space within the cargo block, including cargo tanks, ballast tanks and other non-oil spaces shall be taken as 0.99, unless proven otherwise.

.6 Suction wells may be neglected in the determination of tank location 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, where h is the height as defined in regulation 19.3.2.

5 The following assumptions shall be used when combining the oil outflow parameters:

.1 The mean oil outflow shall be calculated independently for side damage and for bottom damage and then combined into the non-dimensional oil outflow parameter O_M, as follows:

$$O_M = (0.4\ O_{MS} + 0.6\ O_{MB}) / C$$

where:

O_{MS} = mean outflow for side damage, in m^3; and
O_{MB} = mean outflow for bottom damage, in m^3.

.2 For bottom damage, independent calculations for mean outflow shall be done for 0 m and minus 2.5 m tide conditions, and then combined as follows:

$$O_{MB} = 0.7\ O_{MB(0)} + 0.3\ O_{MB(2.5)}$$

where:

$O_{MB(0)}$ = mean outflow for 0 m tide condition; and
$O_{MB(2.5)}$ = mean outflow for minus 2.5 m tide condition, in m^3.

6 The mean outflow for side damage O_{MS} shall be calculated as follows:

$$O_{MS} = C_3 \sum_{i}^{n} P_{s(i)}\ O_{s(i)} \qquad (m^3)$$

where:

i = represents each cargo tank under consideration;

n = total number of cargo tanks;

$P_{S(i)}$ = the probability of penetrating cargo tank i from side damage, calculated in accordance with paragraph 8.1 of this regulation;

$O_{S(i)}$ = the outflow, in m^3, from side damage to cargo tank i, which is assumed equal to the total volume in cargo tank i at 98% filling, unless it is proven through the application of the Guidelines referred to in regulation 19.5 that any significant cargo volume will be retained; and

C_3 = 0.77 for ships having two longitudinal bulkheads inside the cargo tanks, provided these bulkheads are continuous over the cargo block and $P_{s(i)}$ is developed in accordance with this regulation. C_3 equals 1.0 for all other ships or when $P_{s(i)}$ is developed in accordance with paragraph 10 of this regulation.

7 The mean outflow for bottom damage shall be calculated for each tidal condition as follows:

.1 $O_{MB(0)} = \sum_{i}^{n} P_{B(i)} O_{B(i)} C_{DB(i)}$ (m^3)

where:

i = represents each cargo tank under consideration;

n = the total number of cargo tanks;

$P_{B(i)}$ = the probability of penetrating cargo tank i from bottom damage, calculated in accordance with, paragraph 9.1 of this regulation;

$O_{B(i)}$ = the outflow from cargo tank i, in m^3, calculated in accordance with paragraph 7.3 of this regulation; and

$C_{DB(i)}$ = factor to account for oil capture as defined in paragraph 7.4 of this regulation

.2 $O_{MB(2.5)} = \sum_{i}^{n} P_{B(i)} O_{B(i)} C_{DB(i)})$ (m^3)

where:

i,n, $P_{B(i)}$ and $C_{DB(i)}$ = as defined in subparagraph .1 above;

$O_{B(i)}$ = the outflow from cargo tank i, in m^3, after tidal change

.3 The oil outflow $O_{B(i)}$ for each cargo oil tank shall be calculated based on pressure balance principles, in accordance with the following assumptions:

.1 The ship shall be assumed stranded with zero trim and heel, with the stranded draught prior to tidal change equal to the load line draught d_s.

.2 The cargo level after damage shall be calculated as follows:

$$h_c = \{(d_s + t_c - Z_l)\,(\rho_s) - (1000\,p) / g\,\}/\rho_n$$

where:

h_c = the height of the cargo oil above Z_l, in metres;

t_c = the tidal change, in m. Reductions in tide shall be expressed as negative values;

Z_l = the height of the lowest point in the cargo tank above baseline, in m;

ρ_s = density of seawater, to be taken as 1,025 kg/m^3;

p = if an inert gas system is fitted, the normal overpressure, in kPa, to be taken as not less than 5 kPa; if an inert gas system is not fitted, the overpressure may be taken as 0;

g = the acceleration of gravity, to be taken as 9.81 m/s^2; and

ρ_n = nominal density of cargo oil, calculated in accordance with paragraph 4.4 of this regulation.

.3 For cargo tanks bounded by the bottom shell, unless proven otherwise, oil outflow $O_{B(i)}$ shall be taken not less than 1% of the total volume of cargo oil loaded in cargo tank i, to account for initial exchange losses and dynamic effects due to current and waves.

.4 In the case of bottom damage, a portion from the outflow from a cargo tank may be captured by non-oil compartments. This effect is approximated by application of the factor $C_{DB(i)}$ for each tank, which shall be taken as follows:

$C_{DB(i)}$ = 0.6 for cargo tanks bounded from below by non-oil compartments;
$C_{DB(i)}$ = 1.0 for cargo tanks bounded by the bottom shell.

8 The probability P_S of breaching a compartment from side damage shall be calculated as follows:

.1 $P_S = P_{SL}\ P_{SV}\ P_{ST}$

where:

$P_{SL} = 1 - P_{Sf} - P_{Sa}$ = probability the damage will extend into the longitudinal zone bounded by X_a and X_f;

$P_{SV} = 1 - P_{Su} - P_{S1}$ = probability the damage will extend into the vertical zone bounded by Z_l and Z_u; and

$P_{ST} = 1 - P_{Sy}$ = probability the damage will extend transversely beyond the boundary defined by y.

.2 P_{Sa}, P_{Sf}, P_{Sl}, P_{Su} and P_{Sy} shall be determined by linear interpolation from the table of probabilities for side damage provided in paragraph 8.3 of this regulation, where:

P_{Sa} = the probability the damage will lie entirely aft of location X_a/L;

P_{Sf} = the probability the damage will lie entirely forward of location X_f/L;

P_{Sl} = the probability the damage will lie entirely below the tank;

P_{Su} = the probability the damage will lie entirely above the tank; and

P_{Sy} = the probability the damage will lie entirely outboard of the tank.

Compartment boundaries X_a, X_f, Z_l, Z_u and y shall be developed as follows:

X_a = the longitudinal distance from the aft terminal of L to the aftmost point on the compartment being considered, in metres;

X_f = the longitudinal distance from the aft terminal of L to the foremost point on the compartment being considered, in metres;

Z_l = the vertical distance from the moulded baseline to the lowest point on the compartment being considered, in metres;

Z_u = the vertical distance from the moulded baseline to the highest point on the compartment being considered, in metres. Z_u is not to be taken greater than D_s; and

y = the minimum horizontal distance measured at right angles to the centreline between the compartment under consideration and the side shell in metres; *

* For symmetrical tank arrangements, damages are considered for one side of the ship only, in which case all "y" dimensions are to be measured from that same side. For asymmetrical arrangements refer to the Explanatory Notes on matters related to the accidental oil outflow performance, adopted by the Organization by resolution MEPC.122(52).

.3 Table of probabilities for side damage

X_a /L	P_{Sa}	X_f /L	P_{Sf}	Z_l /D_S	P_{Sl}	Z_u /D_S	P_{Su}
0.00	0.000	0.00	0.967	0.00	0.000	0.00	0.968
0.05	0.023	0.05	0.917	0.05	0.000	0.05	0.952
0.10	0.068	0.10	0.867	0.10	0.001	0.10	0.931
0.15	0.117	0.15	0.817	0.15	0.003	0.15	0.905
0.20	0.167	0.20	0.767	0.20	0.007	0.20	0.873
0.25	0.217	0.25	0.717	0.25	0.013	0.25	0.836
0.30	0.267	0.30	0.667	0.30	0.021	0.30	0.789
0.35	0.317	0.35	0.617	0.35	0.034	0.35	0.733
0.40	0.367	0.40	0.567	0.40	0.055	0.40	0.670
0.45	0.417	0.45	0.517	0.45	0.085	0.45	0.599
0.50	0.467	0.50	0.467	0.50	0.123	0.50	0.525
0.55	0.517	0.55	0.417	0.55	0.172	0.55	0.452
0.60	0.567	0.60	0.367	0.60	0.226	0.60	0.383
0.65	0.617	0.65	0.317	0.65	0.285	0.65	0.317
0.70	0.667	0.70	0.267	0.70	0.347	0.70	0.255
0.75	0.717	0.75	0.217	0.75	0.413	0.75	0.197
0.80	0.767	0.80	0.167	0.80	0.482	0.80	0.143
0.85	0.817	0.85	0.117	0.85	0.553	0.85	0.092
0.90	0.867	0.90	0.068	0.90	0.626	0.90	0.046
0.95	0.917	0.95	0.023	0.95	0.700	0.95	0.013
1.00	0.967	1.00	0.000	1.00	0.775	1.00	0.000

P_{Sy} shall be calculated as follows:

$P_{Sy} = (24.96 - 199.6\ y/B_S)\ (y/B_S)$ for $y/B_S \leq 0.05$

$P_{Sy} = 0.749 + \{5 - 44.4\ (y/B_S - 0.05)\}\ (y/B_S - 0.05)$ for $0.05 < y/B_S < 0.1$

$P_{Sy} = 0.888 + 0.56\ (y/B_S - 0.1)$ for $y/B_S \geq 0.1$

P_{Sy} shall not be taken greater than 1.

9 The probability P_B of breaching a compartment from bottom damage shall be calculated as follows:

.1 $P_B = P_{BL}\ P_{BT}\ P_{BV}$

where:

$P_{BL} = 1 - P_{Bf} - P_{Ba}$ = probability the damage will extend into the longitudinal zone bounded by X_a and X_f;

$P_{BT} = 1 - P_{Bp} - P_{Bs}$ = probability the damage will extend into the transverse zone bounded by Y_p and Y_s; and

$P_{BV} = 1 - P_{Bz}$ = probability the damage will extend vertically above the boundary defined by z.

.2 P_{Ba}, P_{Bf}, P_{Bp}, P_{Bs}, and P_{Bz} shall be determined by linear interpolation from the table of probabilities for bottom damage provided in paragraph 9.3 of this regulation, where:

P_{Ba} = the probability the damage will lie entirely aft of location X_a/L;

P_{Bf} = the probability the damage will lie entirely forward of location X_f/L;

P_{Bp} = the probability the damage will lie entirely to port of the tank;

P_{Bs} = the probability the damage will lie entirely to starboard of the tank; and

P_{Bz} = the probability the damage will lie entirely below the tank.

Compartment boundaries X_a, X_f, Y_p, Y_s, and z shall be developed as follows:

X_a and X_f are as defined in paragraph 8.2 of this regulation;

Y_p = the transverse distance from the port-most point on the compartment located at or below the waterline d_B, to a vertical plane located B_B /2 to starboard of the ship's centreline, in metres;

Y_s = the transverse distance from the starboard-most point on the compartment located at or below the waterline d_B, to a vertical plane located B_B /2 to starboard of the ship's centreline, in metres; and

z = the minimum value of z over the length of the compartment, where, at any given longitudinal location, z is the vertical distance from the lower point of the bottom shell at that longitudinal location to the lower point of the compartment at that longitudinal location, in metres.

.3 Table of probabilities for bottom damage

X_a /L	P_{Ba}	X_f /L	P_{Bf}	Y_p /B_B	P_{Bp}	Y_s /B_B	P_{Bs}
0.00	0.000	0.00	0.969	0.00	0.844	0.00	0.000
0.05	0.002	0.05	0.953	0.05	0.794	0.05	0.009
0.10	0.008	0.10	0.936	0.10	0.744	0.10	0.032
0.15	0.017	0.15	0.916	0.15	0.694	0.15	0.063
0.20	0.029	0.20	0.894	0.20	0.644	0.20	0.097
0.25	0.042	0.25	0.870	0.25	0.594	0.25	0.133
0.30	0.058	0.30	0.842	0.30	0.544	0.30	0.171
0.35	0.076	0.35	0.810	0.35	0.494	0.35	0.211
0.40	0.096	0.40	0.775	0.40	0.444	0.40	0.253
0.45	0.119	0.45	0.734	0.45	0.394	0.45	0.297
0.50	0.143	0.50	0.687	0.50	0.344	0.50	0.344
0.55	0.171	0.55	0.630	0.55	0.297	0.55	0.394
0.60	0.203	0.60	0.563	0.60	0.253	0.60	0.444
0.65	0.242	0.65	0.489	0.65	0.211	0.65	0.494
0.70	0.289	0.70	0.413	0.70	0.171	0.70	0.544
0.75	0.344	0.75	0.333	0.75	0.133	0.75	0.594
0.80	0.409	0.80	0.252	0.80	0.097	0.80	0.644
0.85	0.482	0.85	0.170	0.85	0.063	0.85	0.694
0.90	0.565	0.90	0.089	0.90	0.032	0.90	0.744
0.95	0.658	0.95	0.026	0.95	0.009	0.95	0.794
1.00	0.761	1.00	0.000	1.00	0.000	1.00	0.844

P_{Bz} shall be calculated as follows:

$P_{Bz} = (14.5 - 67\ z/D_S)\ (z/D_S)$ for $z/D_S \leq 0.1$,

$P_{Bz} = 0.78 + 1.1\ (z/D_S - 0.1)$ for $z/D_S > 0.1$.

P_{Bz} shall not be taken greater than 1.

10 This regulation uses a simplified probabilistic approach where a summation is carried out over the contributions to the mean outflow from each cargo tank. For certain designs such as those characterized by the occurrence of steps/recesses in bulkheads/decks and for sloping bulkheads and/or a pronounced hull curvature, more rigorous calculations may be appropriate. In such cases one of the following calculation procedures may be applied:

.1 The probabilities referred to in 8 and 9 above may be calculated with more precision through application of hypothetical sub-compartments.*

.2 The probabilities referred to in 8 and 9 above may be calculated through direct application of the probability density functions contained in the Guidelines referred to in regulation 19.5.

.3 The oil outflow performance may be evaluated in accordance with the method described in the Guidelines referred to in regulation 19.5.

* Refer to the Explanatory Notes on matters related to the accidental oil outflow performance, adopted by the Organization by resolution MEPC.122(52).

11 The following provisions regarding piping arrangements shall apply:

.1 Lines of piping that run through cargo tanks in a position less than $0.30B_s$ from the ship's side or less than $0.30D_s$ 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 essential cargo operations.

.2 Credit for reducing oil outflow through the use of an emergency rapid cargo transfer system or other system arranged to mitigate oil outflow in the event of an accident may be taken into account only after the effectiveness and safety aspects of the system are approved by the Organization. Submittal for approval shall be made in accordance with the provisions of the Guidelines referred to in regulation 19.5.

Regulation 24
Damage assumptions

1 For the purpose of calculating hypothetical oil outflow from oil tankers in accordance with regulations 25 and 26, 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.

.1 Side damage:

1 Longitudinal extent(l_c):		1/3 $L^{2/3}$ or 14.5 metres, whichever is less.
2 Transverse extent (t_c) (inboard from the ship's side at right angles to the centreline at the level corresponding to the assigned summer freeboard):		B/5 or 11.5 metres, whichever is less
3 Vertical extent (v_c):		From the base line upwards without limit

.2 Bottom damage:

	For 0.3L from the forward perpendicular of the ship	Any other part of the ship
1 Longitudinal extent (l_s):	L/10	L/10 or 5 metres, whichever is less
2 Transverse extent (t_s):	B/6 or 10 metres, whichever is less but not less than 5 metres	5 metres
3 Vertical extent from the base line (v_s):	B/15 or 6 metres, whichever is less	

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

Regulation 25
Hypothetical outflow of oil

1 The hypothetical outflow of oil in the case of side damage (O_c) and bottom damage (O_s) 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 24 of this Annex.

.1 For side damages:

$$O_c = \Sigma W_i + \Sigma K_i C_i \quad \text{(I)}$$

.2 For bottom damages:

$$O_s = 1/3 \, (\Sigma Z_i W_i + \Sigma Z_i C_i) \quad \text{(II)}$$

where: W_i = volume of a wing tank in cubic metres assumed to be breached by the damage as specified in regulation 24 of this Annex; W_i 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 24 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 = $1 - h_i/v_s$, when h_i is equal to or greater than v_s, 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 h_i 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.

2 If a void space or segregated ballast tank of a length less than l_c as defined in regulation 24 of this Annex is located between wing oil tanks, O_c in formula (I) 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 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 .1 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.

.2 Where the double bottom does not extend for the full length and width of the tank involved, the double bottom is considered non-existent and the volume of the tanks above the area of the bottom damage shall be included in formula (II) even if the tank is not considered breached because of the installation of such a partial double bottom.

.3 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, h_i 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 these 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.

6 This regulation does not apply to oil tankers delivered on or after 1 January 2010, as defined in regulation 1.28.8.

Regulation 26
Limitations of size and arrangement of cargo tanks

1 Except as provided in paragraph 7 below:

1. every oil tanker of 150 gross tonnage and above delivered after 31 December 1979, as defined in regulation 1.28.2, and

2. every oil tanker of 150 gross tonnage and above delivered on or before 31 December 1979, as defined in regulation 1.28.1, which falls into either of the following categories :

.1 a tanker, the delivery of which is after 1 January 1977, or

.2 a tanker to which both the following conditions apply:

.1 delivery is not later than 1 January 1977; and

.2 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.

shall comply with the provisions of this regulation.

2 Cargo tanks of oil tankers shall be of such size and arrangements that the hypothetical outflow O_c or O_s calculated in accordance with the provisions of regulation 25 of this Annex anywhere in the length of the ship does not exceed 30,000 cubic metres or $400\sqrt[3]{DW}$, whichever is the greater, but subject to a maximum of 40,000 cubic metres.

3 The volume of any one wing cargo oil tank of an oil tanker shall not exceed 75 per cent 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 cubic metres. However, in segregated ballast oil tankers as defined in regulation 18 of this Annex, the permitted volume of a wing cargo oil tank situated between two segregated ballast tanks, each exceeding l_c in length, may be increased to the maximum limit of hypothetical oil outflow provided that the width of the wing tanks exceeds t_c.

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

.1 where no longitudinal bulkhead is provided inside the cargo tanks:

$(0.5\frac{b_i}{B} + 0.1)L$ but not to exceed 0.2L

.2 where a centreline longitudinal bulkhead is provided inside the cargo tanks:

$(0.25\frac{b_i}{B} + 0.15)L$

.3 where two or more longitudinal bulkheads are provided inside the cargo tanks:

.1 for wing cargo tanks: 0.2L

.2 for centre cargo tanks:

.1 if $\frac{b_i}{B}$ is equal to or greater than one fifth: 0.2L

.2 if $\frac{b_i}{B}$ is less than one fifth:

- where no centreline longitudinal bulkhead is provided:

$$(0.5\ \frac{b_i}{B} + 0.1)\ L$$

- where a centreline longitudinal bulkhead is provided:

$$(0.25\frac{b_i}{B} + 0.15)\ L$$

.4 b_i 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 t_c from the ship's side or less than v_c 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.

7 This regulation does not apply to oil tankers delivered on or after 1 January 2010, as defined in regulation 1.28.8.

Regulation 27
Intact stability

1 Every oil tanker of 5,000 tonnes deadweight and above delivered on or after 1 February 2002, as defined in regulation 1.28.7, shall comply with the intact stability criteria specified in paragraphs 1.1 and 1.2 of this regulation, as appropriate, for any operating draught under the worst possible conditions of cargo and ballast loading, consistent with good operational practice, including intermediate stages of liquid transfer operations. Under all conditions the ballast tanks shall be assumed slack.

.1 In port, the initial metacentric height GMo, corrected for the free surface measured at 0° heel, shall be not less than 0.15 m;

.2 At sea, the following criteria shall be applicable:

.1 the area under the righting lever curve (GZ curve) shall be not less than 0.055 m.rad up to $\theta = 30^o$ angle of heel and not less than 0.09 m.rad up to $\theta = 40^o$ or other angle of flooding θ_f * if this angle is less than 40^o Additionally, the area under the righting lever curve (GZ curve) between the angles of heel of 30^o and 40^o or between 30^o and θ_f, if this angle is less than 40^o, shall be not less than 0.03 m.rad;

.2 the righting lever GZ shall be at least 0.20 m at an angle of heel equal to or greater than 30^o;

.3 the maximum righting arm shall occur at an angle of heel preferably exceeding 30^o but not less than 25^o; and

.4 the initial metacentric height GMo, corrected for free surface measured at 0^o heel, shall be not less than 0.15 m.

2 The requirements of paragraph 1 of this regulation shall be met through design measures. For combination carriers simple supplementary operational procedures may be allowed.

3 Simple supplementary operational procedures for liquid transfer operations referred to in paragraph 2 of this regulation shall mean written procedures made available to the master which:

.1 are approved by the Administration;

.2 indicate those cargo and ballast tanks which may, under any specific condition of liquid transfer and possible range of cargo densities, be slack and still allow the stability criteria to be met. The slack tanks may vary during the liquid transfer operations and be of any combination provided they satisfy the criteria;

.3 will be readily understandable to the officer-in-charge of liquid transfer operations;

.4 provide for planned sequences of cargo/ballast transfer operations;

.5 allow comparisons of attained and required stability using stability performance criteria in graphical or tabular form;

.6 require no extensive mathematical calculations by the officer-in-charge;

.7 provide for corrective actions to be taken by the officer-in-charge in case of departure from recommended values and in case of emergency situations; and

.8 are prominently displayed in the approved trim and stability booklet and at the cargo/ballast transfer control station and in any computer software by which stability calculations are performed.

* θ_f is the angle of heel at which openings in the hull superstructures or deckhouses which cannot be closed weather tight, immerse. In applying this criterion, small openings through which progressive flooding cannot take place need not be considered as open.

Regulation 28
Subdivision and damage stability

1 Every oil tanker delivered after 31 December 1979, as defined in regulation 1.28.2, of 150 gross tonnage and above, 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 relative densities of the cargo. Such damage shall be applied to all conceivable locations along the length of the ship as follows:

.1 in tankers of more than 225 metres in length, anywhere in the ship's length;

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

.3 in tankers not exceeding 150 metres in length, anywhere in the ship's length between adjacent transverse bulkheads with the exception of the machinery space. For tankers of 100 metres or less in length where all requirements of paragraph 3 of this regulation cannot be fulfilled without materially impairing the operational qualities of the ship, 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.

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

.1 Side damage:

1 Longitudinal extent:	$\frac{1}{3}\left(L^{\frac{2}{3}}\right)$ or 14.5 metres, whichever is less
2 Transverse extent (inboard from the ship's side at right angles to the centreline at the level of the summer load line):	$\frac{B}{5}$ or 11.5 metres, whichever is less
3 Vertical extent:	From the moulded line of the bottom shell plating at centreline, upwards without limit

.2 Bottom damage:

	For 0.3L from the forward perpendicular of the ship	Any other part of the ship
1 Longitudinal extent:	$\frac{1}{3}\left(L^{\frac{2}{3}}\right)$ or 14.5 metres, whichever is less	$\frac{1}{3}\left(L^{\frac{2}{3}}\right)$ or 5 metres, whichever is less
2 Transverse extent:	$\frac{B}{6}$ or 10 metres, whichever is less	$\frac{B}{6}$ or 5 metres, whichever is less
3 Vertical extent:	$\frac{B}{15}$ or 6 metres, whichever is less, measured from the moulded line of the bottom shell plating at centreline	$\frac{B}{15}$ or 6 metres, whichever is less, measured from the moulded line of the bottom shell plating at centreline

.3 If any damage of a lesser extent than the maximum extent of damage specified in subparagraphs 2.1 and 2.2 of this paragraph would result in a more severe condition, such damage shall be considered.

.4 Where the damage involving transverse bulkheads is envisaged as specified in subparagraphs 1.1 and 1.2 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 2.1 of this paragraph in order to be considered effective. Where transverse bulkhead 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.

.5 Where the damage between adjacent transverse watertight bulkheads is envisaged as specified in subparagraph 1.3 of this regulation, no main transverse bulkhead or a transverse bulkhead bounding side tanks or double bottom tanks shall be assumed damaged, unless:

.1 the spacing of the adjacent bulkheads is less than the longitudinal extent of assumed damage specified in subparagraph 2.1 of this paragraph; or

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

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

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

.1 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.

.2 In the final stage of flooding, the angle of heel due to unsymmetrical flooding shall not exceed 25°, provided that this angle may be increased up to 30º if no deck edge immersion occurs.

.3 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 20º beyond the position of equilibrium in association with a maximum residual righting lever of at least 0.1 metre within the 20º 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 3.1 of this paragraph and other openings capable of being closed watertight may be permitted.

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

.5 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 3.1, 3.2 and 3.3 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, relative densities and the free surface effect of liquids. The calculations shall be based on the following:

.1 Account shall be taken of any empty or partially filled tank, the relative density of cargoes carried, as well as any outflow of liquids from damaged compartments.

.2 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*

.3 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 .1 of this regulation in respect of these intact spaces are complied with. Hinged watertight doors may be acceptable in watertight bulkheads in the superstructure.

.4 The free surface effect shall be calculated at an angle of heel of 5º for each individual compartment. The Administration may require or allow the free surface corrections to be calculated at an angle of heel greater than 5º for partially filled tanks.

.5 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 surface is the greatest.

5 The master of every oil tanker to which this regulation applies and the person in charge of a non-self-propelled oil tanker, to which this regulation applies shall be supplied in a approved form with:

.1 information relative to loading and distribution of cargo necessary to ensure compliance with the provisions of this regulation; and

.2 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 1.3 of this regulation.

6 For oil tankers of 20,000 tonnes deadweight and above delivered on or after 6 July 1996, as defined in regulation 1.28.6, the damage assumptions prescribed in paragraph 2.2 of this regulation shall be supplemented by the following assumed bottom raking damage:

.1 longitudinal extent:

.1 ships of 75,000 tonnes deadweight and above:
0.6L measured from the forward perpendicular;

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* 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.

.2 ships of less than 75,000 tonnes deadweight:
0.4L measured from the forward perpendicular;

.2 transverse extent: B/3 anywhere in the bottom;

.3 vertical extent: breach of the outer hull.

Regulation 29
Slop tanks

1 Subject to the provisions of paragraph 4 of regulation 3 of this Annex, oil tankers of 150 gross tonnage and above shall be provided with slop tank arrangements in accordance with the requirements of paragraphs 2.1 to 2.3 of this regulation. In oil tankers delivered on or before 31 December 1979, as defined in regulation 1.28.1, any cargo tank may be designated as a slop tank.

2.1 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.

2.2 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 34 of this Annex.

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

.1 2 per cent for such oil tankers where the tank washing arrangement 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;

.2 2 per cent where segregated ballast tanks or dedicated clean ballast tanks are provided in accordance with regulation 18 of this Annex, or where a cargo tank cleaning system using crude oil washing is fitted in accordance with regulation 3 of this Annex. This capacity may be further reduced to 1.5 per cent for such oil tankers where the tank washing arrangements are such that once the slop tank or tanks are charged with washing water, this water is sufficient for tank washing and, where applicable, for providing the driving fluid for eductors, without the introduction of additional water into the system; and

.3 1 per cent for combination carriers where oil cargo is only carried in tanks with smooth walls. This capacity may be further reduced to 0.8 per cent where the tank washing arrangements are such that once the slop tank or tanks are charged with washing water, this water is sufficient for tank washing and, where applicable, for providing the driving fluid for eductors, without the introduction of additional water into the system.

2.4 Slop tanks shall be so designed particularly in respect of the position of inlets, outlets, baffles or weirs where fitted, so as to avoid excessive turbulence and entrainment of oil or emulsion with the water.

3 Oil tankers of 70,000 tonnes deadweight and above delivered after 31 December 1979, as defined in regulation 1.28.2, shall be provided with at least two slop tanks.

Regulation 30
Pumping, piping and discharge arrangement

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 of 150 gross tonnage and above, pipelines for the discharge to the sea of ballast water or oil contaminated water from cargo tank areas which may be permitted under regulation 34 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 6.1 to 6.5 of this regulation may be accepted.

3 In oil tankers of 150 gross tonnage and above delivered after 31 December 1979, as defined in regulation 1.28.2, 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 oil tanker delivered after 1 June 1982, as defined in regulation 1.28.4, required to be provided with segregated ballast tanks or fitted with a crude oil washing system, shall comply with the following requirements:

.1 it shall be equipped with oil piping so designed and installed that oil retention in the lines is minimized; and

.2 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 draining 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.

5 Every crude oil tanker delivered on or before 1 June 1982, as defined in regulation 1.28.3, required to be provided with segregated ballast tanks, or to be fitted with a crude oil washing system, shall comply with the provisions of paragraph 4.2 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:

.1 Segregated ballast and clean ballast may be discharged below the waterline:

.1 in ports or at offshore terminals, or

.2 at sea by gravity, or

.3 at sea by pumps if the ballast water exchange is performed under the provisions of regulation D-1.1 of the International Convention for the Control and Management of Ships' Ballast Water and Sediments.

provided that the surface of the ballast water has been examined either visually or by other means immediately before the discharge to ensure that no contamination with oil has taken place.

.2 Oil tankers delivered on or before 31 December 1979, as defined in regulation 1.28.1, 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.

.3 Oil tankers delivered on or before 1 June 1982, as defined in regulation 1.28.3 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 18.8.3 of this Annex.

.4 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 32 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.

.5 On oil tankers delivered on or before 31 December 1979, as defined in regulation 1.28.1, 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 6.4 of this paragraph, provided that:

.1 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

.2 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*.

7 Every oil tanker of 150 gross tonnage and above delivered on or after 1 January 2010, as defined in regulation 1.28.8, which has installed a sea chest that is permanently connected to the cargo pipeline system, shall be equipped with both a sea chest valve and an inboard isolation valve. In addition to these valves, the sea chest shall be capable of isolation from the cargo piping system whilst the tanker is loading, transporting, or discharging cargo by use of a positive means that is to the satisfaction of the Administration. Such a positive means is a facility that is installed in the pipeline system in order to prevent, under all circumstances, the section of pipeline between the sea chest valve and the inboard valve being filled with cargo.

PART B EQUIPMENT

Regulation 31
Oil discharge monitoring and control system

1 Subject to the provisions of paragraphs 4 and 5 of regulation 3 of this Annex, oil tankers of 150 gross tonnage and above shall be equipped with an oil discharge monitoring and control system approved by the Administration.

2 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 34 of this Annex. Any failure of this monitoring and control system shall stop the discharge. In the event of failure of the oil discharge monitoring and control system a manually operated alternative method may be used, but the defective unit shall be made operable as soon as possible. Subject to allowance by the port State authority a tanker with a defective oil discharge monitoring and control system may undertake one ballast voyage before proceeding to a repair port.

3 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

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* See appendix 4 to Unified Interpretations.

† 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 on 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). For oil content meters as part of discharge monitoring and control systems installed on oil tankers the keel of which are laid or which are in a similar stage of construction on or after 1 January 2005, refer to the revised Guidelines and specifications for oil discharge monitoring and control systems for oil tankers adopted by the Organization by resolution MEPC.108(49).

system for oil tankers developed by the Organization[‡]. Administrations may accept such specific arrangements as detailed in the Guidelines and Specifications.

4 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 34 of this Annex.

Regulation 32
Oil/water interface detector[*]

Subject to the provisions of paragraphs 4 and 5 of regulation 3 of this Annex, oil tankers of 150 gross tonnage and above shall be provided with effective oil/water interface detectors approved by the Administration 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.

Regulation 33
Crude oil washing requirements

1 Every crude oil tanker of 20,000 tonnes deadweight and above delivered after 1 June 1982, as defined in regulation 1.28.4, shall be fitted with a cargo tank cleaning system using crude oil washing. The Administration shall ensure that the system fully complies with the requirements of this regulation 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.

2 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 Organization[†]. When a ship is not required, in accordance with paragraph 1 of this regulation to be, but is equipped with crude oil washing equipment, it shall comply with the safety aspects of the above-mentioned Specifications.

3 Every crude oil washing system required to be provided in accordance with regulation 18.7 of this Annex shall comply with the requirements of this regulation.

[‡] Refer to the Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers adopted by the Organization by resolution A.496 (XII) or the Revised Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers adopted by the Organization by resolution A.586(14), or the Revised Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers adopted by the Organization by resolution MEPC.108(49) as applicable.

[*] Refer to the Specifications for Oil/Water Interface Detectors adopted by the Organization by resolution MEPC.5(XIII).

[†] Refer to the revised Specifications for the design, 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) and as further amended by resolution A.897(21).

PART C CONTROL OF OPERATIONAL DISCHARGES OF OIL

Regulation 34
Control of discharge of oil

A. Discharges outside special areas

1 Subject to the provisions of regulation 4 of this Annex and paragraph 2 of this regulation, any discharge into the sea of oil or oily mixtures from the cargo area of an oil tanker, shall be prohibited except when all the following conditions are satisfied:

.1 the tanker is not within a special area;

.2 the tanker is more than 50 nautical miles from the nearest land;

.3 the tanker is proceeding en route;

.4 the instantaneous rate of discharge of oil content does not exceed 30 litres per nautical mile;

.5 the total quantity of oil discharged into the sea does not exceed for tankers delivered on or before 31 December 1979, as defined in regulation 1.28.1, 1/15,000 of the total quantity of the particular cargo of which the residue formed a part, and for tankers delivered after 31 December 1979, as defined in regulation 1.28.2, 1/30,000 of the total quantity of the particular cargo of which the residue formed a part; and

.6 the tanker has in operation an oil discharge monitoring and control system and a slop tank arrangement as required by regulations 29 and 31 of this Annex.

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

B. Discharges in special areas

3 Subject to the provisions of paragraph 4 of this regulation, any discharge into the sea of oil or oily mixture from the cargo area of an oil tanker shall be prohibited while in a special area[*].

4 The provisions of paragraph 3 of this regulation shall not apply to the discharge of clean or segregated ballast.

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 paragraph 1 of this regulation.

C. Requirements for oil tankers of less than 150 gross tonnage

6 The requirements of regulations 29, 31 and 32 of this Annex shall not apply to oil tankers of less than 150 gross tonnage, for which the control of discharge of oil under this regulation

[*] Refer to regulation 38.6

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 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 this regulation are complied with.

D. General requirements

7 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 present 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. 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.

8 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.

9 The oil residues which cannot be discharged into the sea in compliance with paragraphs 1 and 3 of this regulation shall be retained on board for subsequent discharge to reception facilities.

Regulation 35
Crude oil washing operations

1 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 regulation 33 of this Annex. If an alteration affecting the crude oil washing system is made, the Operations and Equipment Manual shall be revised accordingly.

2 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.

3 Unless an oil tanker carries crude oil which is not suitable for crude oil washing, the oil tanker shall operate the crude oil washing system in accordance with the Operations and Equipment Manual.

* 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), as amended by resolution MEPC.81(43).

Regulation 36
Oil Record Book, Part II - Cargo/ballast operations

1 Every oil tanker of 150 gross tonnage and above shall be provided with an Oil Record Book Part II (Cargo/Ballast Operations). The Oil Record Book Part II, whether as a part of the ship's official logbook or otherwise, shall be in the Form specified in appendix III to this Annex.

2 The Oil Record Book Part II shall be completed on each occasion, on a tank-to-tank basis if appropriate, whenever any of the following cargo/ballast operations take place in the ship:

.1 loading of oil cargo;

.2 internal transfer of oil cargo during voyage;

.3 unloading of oil cargo;

.4 ballasting of cargo tanks and dedicated clean ballast tanks;

.5 cleaning of cargo tanks including crude oil washing;

.6 discharge of ballast except from segregated ballast tanks;

.7 discharge of water from slop tanks;

.8 closing of all applicable valves or similar devices after slop tank discharge operations;

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

.10 disposal of residues.

3 For oil tankers referred to in regulation 34.6 of this Annex, the total quantity of oil and water used for washing and returned to a storage tank shall be recorded in the Oil Record Book Part II.

4 In the event of such discharge of oil or oily mixture as is referred to in regulation 4 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 Part II of the circumstances of, and the reasons for, the discharge.

5 Each operation described in paragraph 2 of this regulation shall be fully recorded without delay in the Oil Record Book Part II 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 Part II shall be at least in English, French or Spanish. Where entries in an official language of the State whose flag the ship is entitled to fly are also used, this shall prevail in case of dispute or discrepancy.

6 Any failure of the oil discharge monitoring and control system shall be noted in the Oil Record Book Part II.

7 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.

8 The competent authority of the Government of a Party to the Convention may inspect the Oil Record Book Part II 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 Part II shall be made admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of an Oil Record Book Part II 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.

9 For oil tankers of less than 150 gross tonnage operating in accordance with regulation 34.6 of this Annex, an appropriate Oil Record Book should be developed by the Administration.

CHAPTER 5 - PREVENTION OF POLLUTION ARISING FROM AN OIL POLLUTION INCIDENT

Regulation 37
Shipboard oil pollution emergency plan

1 Every oil tanker of 150 gross tonnage and above and every ship other than an oil tanker of 400 gross tonnage and above shall carry on board a shipboard oil pollution emergency plan approved by the Administration.

2 Such a plan shall be prepared based on guidelines[*] developed by the Organization and written in the working language of the master and officers. The plan shall consist at least of:

.1 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;[†]

.2 the list of authorities or persons to be contacted in the event of an oil pollution incident;

.3 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

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[*] Refer to the Guidelines for the development of shipboard oil pollution emergency plans adopted by the Organization by resolution MEPC.54(32) as amended by resolution MEPC.86(44).

[†] 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.851(20).

.4 the procedures and point of contact on the ship for co-ordinating shipboard action with national and local authorities in combating the pollution.

3 In the case of ships to which regulation 17 of Annex II of the present Convention also apply, such a plan may be combined with the shipboard marine pollution emergency plan for noxious liquid substances required under regulation 17 of Annex II of the present Convention. In this case, the title of such a plan shall be “Shipboard marine pollution emergency plan”.

4 All oil tankers of 5,000 tons deadweight or more shall have prompt access to computerised, shore-based damage stability and residual structural strength calculation programs.

CHAPTER 6 - RECEPTION FACILITIES

Regulation 38
Reception facilities

A. Reception facilities outside special areas

1 The Government of each Party to the present Convention 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:

.1 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;

.2 all ports and terminals in which oil other than crude oil in bulk is loaded at an average quantity of more than 1,000 tonnes per day;

.3 all ports having ship repair yards or tank cleaning facilities;

.4 all ports and terminals which handle ships provided with the sludge tank(s) required by regulation 12 of this Annex;

.5 all ports in respect of oily bilge waters and other residues, which cannot be discharged in accordance with regulation 15 of this Annex; and

.6 all loading ports for bulk cargoes in respect of oil residues from combination carriers which cannot be discharged in accordance with regulation 34 of this Annex.

‡ See resolution MEPC.83(44) “Guidelines for ensuring the adequacy of port waste reception facilities”.

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

.1 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 34.1 of this Annex from all oil tankers on voyages as described in paragraph 2.1 of this regulation.

.2 Loading ports and terminals referred to in paragraph 2.2 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 34.1 of this Annex from oil tankers which load oil other than crude oil in bulk.

.3 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.

.4 All facilities provided in ports and terminals under paragraph 2.4 of this regulation shall be sufficient to receive all residues retained according to regulation 12 of this Annex from all ships that may reasonably be expected to call at such ports and terminals.

.5 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 15 of this Annex.

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

B. Reception facilities within special areas

4 The Government of each Party to the present Convention the coastline of which borders on any given special area shall ensure that 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**.**

5 The Government of each Party to the present Convention 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 ensure the provision of the facilities referred to in paragraph 4 of this regulation but with the proviso that ships required to discharge slops or dirty ballast could be subject to some delay.

* See resolution MEPC.83(44) “Guidelines for ensuring the adequacy of port waste reception facilities”.

6 With regard to the Red Sea area, Gulfs area, Gulf of Aden area and Oman area of the Arabian Sea:

.1 Each Party concerned shall notify the Organization of the measures taken pursuant to provisions of paragraphs 4 and 5 of this regulation. Upon receipt of sufficient notifications the Organization shall establish a date from which the discharge requirements of regulations 15 and 34 of this Annex 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.

.2 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 regulations 15 and 34 of this Annex as regards discharges outside special areas.

.3 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 regulations 15 and 34 of this Annex as regards discharges within special areas. 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.

.4 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.

.5 At least the reception facilities as prescribed in paragraphs 1, 2 and 3 of this regulation shall be provided one year after the date of entry into force of the present Convention.

7 Notwithstanding paragraphs 4, 5 and 6 of this regulation, the following rules apply to the Antarctic area:

.1 The Government of each Party to the present 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.

.2 The Government of each Party to the present 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.

C. General requirements

8 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.

CHAPTER 7 - SPECIAL REQUIREMENTS FOR FIXED OR FLOATING PLATFORMS

Regulation 39
Special requirements for fixed or floating platforms

1 This regulation applies to fixed or floating platforms including drilling rigs, floating production, storage and offloading facilities (FPSOs) used for the offshore production and storage of oil, and floating storage units (FSUs) used for the offshore storage of produced oil.

2 Fixed or floating platforms 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 gross tonnage and above other than oil tankers, except that:

.1 they shall be equipped as far as practicable with the installations required in regulations 12 and 14 of this Annex;

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

.3 subject to the provisions of regulation 4 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.

3 In verifying compliance with this Annex in relation to platforms configured as FPSOs or FSUs, in addition to the requirements of paragraph 2, Administrations should take account of the Guidelines developed by the Organization*.

APPENDICES TO ANNEX I

Appendix I **List of oils**
Appendix II **Form of IOPP Certificate and Supplements**
Appendix III **Form of Oil Record Book**

* Refer to resolution MEPC …(..) "Guidelines for the application of MARPOL Annex I requirements to FPSOs and FSUs."

APPENDIX I

LIST OF OILS*

Asphalt solutions
Blending stocks
Roofers flux
Straight run residue

Gasoline blending stocks
Alkylates – fuel
Reformates
Polymer – fuel

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

Gasolines
Casinghead (natural)

Automotive
Aviation
Straight run
Fuel oil no. 1 (kerosene)
Fuel oil no. 1-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

Distillates

Straight run
Flashed feed stocks

Naphtha
Solvent
Petroleum
Heartcut distillate oil

Gas oil

Cracked

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

APPENDIX II

FORM OF IOPP CERTIFICATE AND SUPPLEMENTS

INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE

(Note: This certificate shall be supplemented by a Record of Construction and Equipment)

Issued under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended, (hereinafter referred to as "the Convention") under the authority of the Government of :

.....

(full designation of the country)

by .....

(full designation of the competent person or organization authorized under the provisions of the Convention)

Particulars of ship[*]

Name of ship .....

Distinctive number or letters .....

Port of registry .....

Gross tonnage .....

Deadweight of ship (tonnes)[†] .....

IMO Number[‡] .....

[*] Alternatively, the particulars of the ship may be placed horizontally in boxes.

[†] For oil tankers

[‡] Refer to the IMO Ship Identification Number Scheme adopted by the Organization by resolution A.600(15).

Type of ship:*

Oil tanker

Ship other than an oil tanker with cargo tanks coming under regulation 2.2 of Annex I of the Convention

Ship other than any of the above

THIS IS TO CERTIFY:

1. That the ship has been surveyed in accordance with regulation 6 of Annex I of the Convention; and

2. That the survey shows that the structure, equipment systems, fittings, arrangement and material of the ship and the condition thereof are in all respects satisfactory and that the ship complies with the applicable requirements of Annex I of the Convention.

This certificate is valid until .....……...†
subject to surveys in accordance with regulation 6 of Annex I of the Convention.

Completion date of the survey on which this certificate is based: dd/mm/yyyy……

Issued at ….……
(Place of issue of certificate)

…….…….....
(Date of issue)

…….……..……
(Signature of authorized official issuing the certificate)

(Seal or stamp of the authority, as appropriate)

---

* Delete as appropriate

† Insert the date of expiry as specified by the Administration in accordance with regulation 10.1 of Annex I of the Convention. The day and the month of this day correspond to the anniversary date as defined in regulation 1.27 of Annex I of the Convention, unless amended in accordance with regulation 10.8 of Annex I of the Convention.

ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that at a survey required by regulation 6 of Annex I of the Convention the ship was found to comply with the relevant provisions of the Convention:

Annual survey: Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Sea/ or stamp of the authority, as appropriate)

Annual*/Intermediate survey*: Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Sea/ or stamp of the authority, as appropriate)

Annual*/Intermediate survey*: Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Sea/ or stamp of the authority, as appropriate)

Annual survey: Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate

ANNUAL/INTERMEDIATE SURVEY IN ACCORDANCE WITH REGULATION 10.8.3

THIS IS TO CERTIFY that, at an annual/intermediate* survey in accordance with regulation 10.8.3 of Annex I of the Convention, the ship was found to comply with the relevant provisions of the Convention:

Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE REGULATION 10.3 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 10.3 of Annex I of the Convention, be accepted as valid until……

Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND REGULATION 10.4 APPLIES

The ship complies with the relevant provisions of the Convention and this Certificate shall, in accordance with regulation 10.4 of Annex I of the Convention, be accepted as valid until ……

Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE REGULATION 10.5 OR 10.6 APPLIES

This Certificate shall, in accordance with regulation 10.5 or 10.6* of Annex I of the Convention, be accepted as valid until ……..

Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE REGULATION 10.8 APPLIES

In accordance with regulation 10.8 of Annex I of the Convention the new anniversary date is …….

Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

In accordance with regulation 10.8 of Annex I of the Convention the new anniversary date is …….

Signed .....
(Signature of duly authorized official)

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate

FORM A

Supplement to the International Oil Pollution Prevention Certificate (IOPP Certificate)

RECORD OF CONSTRUCTION AND EQUIPMENT FOR SHIPS OTHER THAN OIL TANKERS

in respect of the provisions of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention").

Notes:

1 This form is to be used for the third type of ships as categorized in the IOPP Certificate, i.e. "ships other than any of the above". For oil tankers and ships other than oil tankers with cargo tanks coming under regulation 2.2 of Annex I of the Convention, Form B shall be used.

2 This Record shall be permanently attached to the IOPP Certificate. The IOPP Certificate shall be available on board the ship at all times.

3 If the language of the original Record is neither English nor French nor Spanish, the text shall include a translation into one of these languages.

4 Entries in boxes shall be made by inserting either a cross (x) for the answers "yes" and "applicable" or a dash (-) for the answers "no" and "not applicable" as appropriate.

5 Regulations mentioned in this Record refer to regulations of Annex I of the Convention and resolutions refer to those adopted by the International Maritime Organization.

1. Particulars of ship

1.1 Name of ship .....

1.2 Distinctive number or letters .....

1.3 Port of registry .....

1.4 Gross tonnage .....

1.5 Date of build:

1.5.1 Date of building contract .....

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

1.5.3 Date of delivery .....

1.6 Major conversion (if applicable):

1.6.1 Date of conversion contract .....

1.6.2 Date on which conversion was commenced .....

1.6.3 Date of completion of conversion .....

1.7 The ship has been accepted by the Administration as a "ship delivered on or before 31 December 1979" under regulation 1.28.1 due to unforeseen delay in delivery □

2. Equipment for the control of oil discharge from machinery space bilges and oil fuel tanks
(regulations 16 and 14)

2.1 Carriage of ballast water in oil fuel tanks:

2.1.1 The ship may under normal conditions carry ballast water in oil fuel tanks □

2.2 Type of oil filtering equipment fitted:

2.2.1 Oil filtering (15 ppm) equipment (regulation 14.6) □

2.2.2 Oil filtering (15 ppm) equipment with alarm and automatic stopping device (regulation 14.7) □

2.3 Approval standards:*

2.3.1 The separating/filtering equipment:

.1 has been approved in accordance with resolution A.393(X); □

.2 has been approved in accordance with resolution MEPC.60(33); □

.3 has been approved in accordance with resolution MEPC.107(49); □

---

* Refer to the Recommendation on international performance and test specifications of oily-water separating equipment and oil content meters adopted by the Organization on 14 November 1977 by resolution A.393(X), which superseded resolution A.233(VII). Further reference is made to the Guidelines and specifications for pollution prevention equipment for machinery space bilges adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.60(33), which, effective on 6 July 1993, superseded resolutions A.393(X) and A.444(XI)(see IMO sales publication IMO-646E); and to the revised Guidelines and specifications for pollution prevention equipment for machinery spaces of ships adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.107(49) which, effective on 1 January 2005, superseded resolutions MEPC.60(33), A.393(X) and A.444(XI) (see IMO sales publication IMO-……).

.4 has been approved in accordance with resolution A.233(VII); □

.5 has been approved in accordance with national standards not based upon resolution A.393(X) or A.233(VII); □

.6 has not been approved. □

2.3.2 The process unit has been approved in accordance with resolution A.444(XI) □

2.3.3 The oil content meter :

.1 has been approved in accordance with resolution A.393(X); □

.2 has been approved in accordance with resolution MEPC.60(33); □

.3 has been approved in accordance with resolution MEPC.107(49). □

2.4 Maximum throughput of the system is ..... m^3/h

2.5 Waiver of regulation 14:

2.5.1 The requirements of regulation 14.1 or 14.2 are waived in respect of the ship in accordance with regulation 14.5.

2.5.1.1 The ship is engaged exclusively on voyages within special area(s): ..... □

2.5.1.2 The ship is certified under the International Code of Safety for High-Speed Craft and engaged on a scheduled service with a turn-around time not exceeding 24 hours □

2.5.2 The ship is fitted with holding tank(s) for the total retention on board of all oily bilge water as follows: □

Tank identification	**Tank location**		**Volume (m^3)**
	Frames (from) - (to)	**Lateral position**	
		Total volume: .....……..m^3	

3. Means for retention and disposal of oil residues (sludge) (regulation 12) and bilge water holding tank(s)*

3.1 The ship is provided with oil residue (sludge) tanks as follows:

Tank identification	**Tank location**		**Volume (m^3)**
	Frames (from) - (to)	**Lateral position**	
		Total volume: .....……..m^3	

3.2 Means for the disposal of residues in addition to the provisions of sludge tanks:

3.2.1 Incinerator for oil residues, capacity .....…….. l/h □

3.2.2 Auxiliary boiler suitable for burning oil residues □

3.2.3 Tank for mixing oil residues with fuel oil, capacity ..... m^3 □

3.2.4 Other acceptable means: ..... □

3.3 The ship is provided with holding tank(s) for the retention on board of oily bilge water as follows:

Tank identification	**Tank location**		**Volume (m^3)**
	Frames (from) - (to)	**Lateral position**	
		Total volume: .....……..m^3	

4. Standard discharge connection
(regulation 13)

4.1 The ship is provided with a pipeline for the discharge of residues from machinery bilges and sludges to reception facilities, fitted with a standard discharge connection in accordance with regulation 13 □

* Bilge water holding tank(s) are not required by the Convention, entries in the table under paragraph 3.3 are voluntary.

5. Shipboard oil/marine pollution emergency plan
(regulation 37)

5.1 The ship is provided with a shipboard oil pollution emergency plan in compliance with regulation 37 □

5.2 The ship is provided with a shipboard marine pollution emergency plan in compliance with regulation 37.3 □

6. Exemption

6.1 Exemptions have been granted by the Administration from the requirements of chapter 3 of Annex I of the Convention in accordance with regulation 3.1 on those items listed under paragraph(s) .... of this Record □

7. Equivalents (regulation 5)

7.1 Equivalents have been approved by the Administration for certain requirements of Annex I on those items listed under paragraph(s) ..... of this Record □

THIS IS TO CERTIFY that this Record is correct in all respects.

Issued at ……..

(Place of issue of the Record)

…… ……
(Signature of duly authorized official issuing the Record)

(Seal or stamp of the issuing authority, as appropriate)

FORM B

Supplement to the International Oil Pollution Prevention Certificate (IOPP Certificate)

RECORD OF CONSTRUCTION AND EQUIPMENT FOR OIL TANKERS

in respect of the provisions of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as "the Convention").

Notes:

1 This form is to be used for the first two types of ships as categorized in the IOPP Certificate, i.e. "oil tankers" and "ships other than oil tankers with cargo tanks coming under regulation 2.2 of Annex I of the Convention". For the third type of ships as categorized in the IOPP Certificate, Form A shall be used.

2 This Record shall be permanently attached to the IOPP Certificate. The IOPP Certificate shall be available on board the ship at all times.

3 If the language of the original Record is neither English nor French nor Spanish, the text shall include a translation into one of these languages.

4 Entries in boxes shall be made by inserting either a cross (x) for the answers "yes" and "applicable" or a dash (-) for the answers "no" and "not applicable" as appropriate.

5 Unless otherwise stated, regulations mentioned in this Record refer to regulations of Annex I of the Convention and resolutions refer to those adopted by the International Maritime Organization.

1. Particulars of ship

1.1 Name of ship .....

1.2 Distinctive number or letters .....

1.3 Port of registry .....

1.4 Gross tonnage .....

1.5 Carrying capacity of ship ..... (m^3)

1.6 Deadweight of ship ..... (tonnes) (regulation 1.23)

1.7 Length of ship ..... (m) (regulation 1.19)

1.8 Date of build:

1.8.1 Date of building contract .....

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

1.8.3 Date of delivery .....

1.9 Major conversion (if applicable):

1.9.1 Date of conversion contract .....

1.9.2 Date on which conversion was commenced .....

1.9.3 Date of completion of conversion. .....

1.10 Unforeseen delay in delivery:

1.10.1 The ship has been accepted by the Administration as a “ship delivered on or before 31 December 1979" under regulation 1.28.1 due to unforeseen delay in delivery □

1.10.2 The ship has been accepted by the Administration as an “oil tanker delivered on or before 1 June 1982” under regulation 1.28.3 due to unforeseen delay in delivery □

1.10.3 The ship is not required to comply with the provisions of regulation 26 due to unforeseen delay in delivery □

1.11 Type of ship:

1.11.1 Crude oil tanker □

1.11.2 Product carrier □

1.11.3 Product carrier not carrying fuel oil or heavy diesel oil as referred to in regulation 20.2, or lubricating oil □

1.11.4 Crude oil/product carrier □

1.11.5 Combination carrier □

1.11.6 Ship, other than an oil tanker, with cargo tanks coming under regulation 2.2 of Annex I of the Convention □

1.11.7 Oil tanker dedicated to the carriage of products referred to in regulation 2.4 □

1.11.8 The ship, being designated as a "crude oil tanker" operating with COW, is also designated as a "product carrier" operating with CBT, for which a separate IOPP Certificate has also been issued □

1.11.9 The ship, being designated as a "product carrier" operating with CBT, is also designated as a "crude oil tanker" operating with COW, for which a separate IOPP Certificate has also been issued □

2. Equipment for the control of oil discharge from machinery space bilges and oil fuel tanks
(regulations 16 and 14)

2.1 Carriage of ballast water in oil fuel tanks:

2.1.1 The ship may under normal conditions carry ballast water in oil fuel tanks □

2.2 Type of oil filtering equipment fitted:

2.2.1 Oil filtering (15 ppm) equipment (regulation 14.6) □

2.2.2 Oil filtering (15 ppm) equipment with alarm and automatic stopping device (regulation 14.7) □

2.3 Approval standards: *

2.3.1 The separating/filtering equipment:

.1 has been approved in accordance with resolution A.393(X); □

.2 has been approved in accordance with resolution MEPC.60(33); □

.3 has been approved in accordance with resolution MEPC.107(49); □

.4 has been approved in accordance with resolution A.233(VII); □

* Refer to the Recommendation on international performance and test specifications of oily-water separating equipment and oil content meters adopted by the Organization on 14 November 1977 by resolution A.393(X), which superseded resolution A.233(VII); Further reference is made to the Guidelines and specifications for pollution prevention equipment for machinery space bilges adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.60(33), which, effective on 6 July 1993, superseded resolutions A.393(X) and A.444(XI) (see IMO sales publication IMO-646E); and to the revised Guidelines and specifications for pollution prevention equipment for machinery spaces of ships adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.107(49) which, effective on 1 January 2005, superseded resolutions MEPC.60(33), A.393(X) and A.444(XI) (see IMO sales publication IMO….).

.5 has been approved in accordance with national standards not based upon resolution A.393(X) or A.233(VII); □

.6 has not been approved. □

2.3.2 The process unit has been approved in accordance with resolution A.444(XI) □

2.3.3 The oil content meter :

.1 has been approved in accordance with resolution A.393(X); □

.2 has been approved in accordance with resolution MEPC.60(33); □

.3 has been approved in accordance with resolution MEPC.107(49). □

2.4 Maximum throughput of the system is ..... m^3/h

2.5 Waiver of regulation 14:

2.5.1 The requirements of regulation 14.1 or 14.2 are waived in respect of the ship in accordance with regulation 14.5.

The ship is engaged exclusively on voyages within special area(s): ..... □

2.5.2 The ship is fitted with holding tank(s) for the total retention on board of all oily bilge water as follows : □

Tank identification	**Tank location**		**Volume (m^3)**
	Frames (from) - (to)	**Lateral position**	
		Total volume: .....……..m^3	

2.5.3 In lieu of the holding tank(s) the ship is provided with arrangements to transfer bilge water to the slop tank □

3. Means for retention and disposal of oil residues (sludge) (regulation 12) and bilge water holding tank(s)*

3.1 The ship is provided with oil residue (sludge) tanks as follows:

Tank identification	**Tank location**		**Volume (m^3)**
	Frames (from) - (to)	**Lateral position**	
		Total volume: .....……..m^3	

3.2 Means for the disposal of residues in addition to the provisions of sludge tanks:

3.2.1 Incinerator for oil residues, capacity ..... l/h □

3.2.2 Auxiliary boiler suitable for burning oil residues □

3.2.3 Tank for mixing oil residues with fuel oil, capacity ..... m^3 □

3.2.4 Other acceptable means: ..... □

3.3 The ship is provided with holding tank(s) for the retention on board of oily bilge water as follows:

Tank identification	**Tank location**		**Volume (m^3)**
	Frames (from) - (to)	**Lateral position**	
		Total volume: .....……..m^3	

4. Standard discharge connection
(regulation 13)

4.1 The ship is provided with a pipeline for the discharge of residues from machinery bilges and sludges to reception facilities, fitted with a standard discharge connection in accordance with regulation 13 □

* Bilge water holding tank(s) are not required by the Convention, entries in the table under paragraph 3.3 are voluntary.

5. Construction (regulations 18**,** 19, 20, 23, 26, 27 and 28)

5.1 In accordance with the requirements of regulation 18, the ship is:

5.1.1 Required to be provided with SBT, PL and COW □

5.1.2 Required to be provided with SBT and PL □

5.1.3 Required to be provided with SBT □

5.1.4 Required to be provided with SBT or COW □

5.1.5 Required to be provided with SBT or CBT □

5.1.6 Not required to comply with the requirements of regulation 18 □

5.2 Segregated ballast tanks (SBT):

5.2.1 The ship is provided with SBT in compliance with regulation 18 □

5.2.2 The ship is provided with SBT, in compliance with regulation 18, which are arranged in protective locations (PL) in compliance with regulations 18.12 to 18.15 □

5.2.3 SBT are distributed as follows:

Tank	**Volume (m^3)**	**Tank**	**Volume (m^3)**
		Total volume:	**.....m^3**

5.3 Dedicated clean ballast tanks (CBT):

5.3.1 The ship is provided with CBT in compliance with regulation 18.8, and may operate as a product carrier □

5.3.2 CBT are distributed as follows:

Tank	**Volume (m^3)**	**Tank**	**Volume (m^3)**
		Total volume:	**.....m^3**

5.3.3 The ship has been supplied with a valid Dedicated Clean Ballast Tank Operation Manual, which is dated ..... □

5.3.4 The ship has common piping and pumping arrangements for ballasting the CBT and handling cargo oil ..... □

5.3.5 The ship has separate independent piping and pumping arrangements for ballasting the CBT □

5.4 Crude oil washing (COW):

5.4.1 The ship is equipped with a COW system in compliance with regulation 33 □

5.4.2 The ship is equipped with a COW system in compliance with regulation 33 except that the effectiveness of the system has not been confirmed in accordance with regulation 33.1 and paragraph 4.2.10 of the Revised COW Specifications (resolution A.446(XI) as amended by resolutions A.497(XII) and A.897(21)) □

5.4.3 The ship has been supplied with a valid Crude Oil Washing Operations and Equipment Manual which is dated ..... □

5.4.4 The ship is not required to be but is equipped with COW in compliance with the safety aspects of the Revised COW Specifications (resolution A.446(XI) as amended by resolutions A.497(XII) and A.897(21)) □

5.5 Exemption from regulation 18:

5.5.1 The ship is solely engaged in trade between .....
.....
in accordance with regulation 2.5 and is therefore exempted from the requirements of regulation 18 □

5.5.2 The ship is operating with special ballast arrangements in accordance with regulation 18.10 and is therefore exempted from the requirements of regulation 18 □

5.6 Limitation of size and arrangements of cargo tanks (regulation 26):

5.6.1 The ship is required to be constructed according to, and complies with, the requirements of regulation 26 □

5.6.2 The ship is required to be constructed according to and complies with, the requirements of regulation 26.4 (see regulation 2.2) □

5.7 Subdivision and stability (regulation 28):

5.7.1 The ship is required to be constructed according to, and complies with, the requirements of regulation 28 □

5.7.2 Information and data required under regulation 28.5 have been supplied to the ship in an approved form □

5.7.3 The ship is required to be constructed according to, and complies with, the requirements of regulation 27 □

5.7.4 Information and data required under regulation 27 For combination carriers have been supplied to the ship n a written procedure approved by the Administration □

5.8 Double-hull construction:

5.8.1 The ship is required to be constructed according to regulation 19 and complies with the requirements of:

.1 paragraph (3) (double-hull construction) □

.2 paragraph (4) (mid-height deck tankers with double side construction) □

.3 paragraph (5) (alternative method approved by the Marine Environment Protection Committee) □

5.8.2 The ship is required to be constructed according to and complies with the requirements of regulation 19.6 (double bottom requirements) □

5.8.3 The ship is not required to comply with the requirements of regulation 19 □

5.8.4 The ship is subject to regulation 20 and:

.1 is required to comply with paragraphs 2 to 5, 7 and 8 of regulation 19 and regulation 28 in respect of paragraph 28.6 not later than ..... □

.2 is allowed to continue operation in accordance with regulation 20.5 until ..... □

.3 is allowed to continue operation in accordance with regulation 20.7 until ..... □

5.8.5 The ship is not subject to regulation 20 □

5.8.6 The ship is subject to regulation 21 and:

.1 is required to comply with regulation 21.4 not later than ..... □

.2 is allowed to continue operation in accordance with regulation 21.5 until ..... □

.3 is allowed to continue operation in accordance with regulation 21.6.1 until ..... □

.4 is allowed to continue operation in accordance with regulation 21.6.2 until ..... □

.5 is exempted from the provisions of regulation 21 in accordance with regulation 21.7.2 □

5.8.7 The ship is not subject to regulation 21 □

5.8.8 The ship is subject to regulation 22 and:

.1 complies with the requirements of regulation 22.2..... □

.2 complies with the requirements of regulation 22.3..... □

.3 complies with the requirements of regulation 22.5..... □

5.8.9 The ship is not subject to regulation 22..... □

5.9 Accidental oil outflow performance

5.9.1 The ship complies with the requirements of regulation 23 □

6. Retention of oil on board (regulations 29, 31 and 32)

6.1 Oil discharge monitoring and control system:

6.1.1 The ship comes under category ..... oil tanker as defined in resolution A.496(XII) or A.586(14)* *(delete as appropriate)* □

6.1.2 The oil discharge monitoring and control system has been approved in accordance with resolution MEPC.108(49)** □

6.1.3 The system comprises:

.1 control unit □

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* Oil tankers the keels of which are laid, or which are at a similar stage of construction, on or after 2 October 1986 should be fitted with a system approved under resolution A.586(14); see IMO sales publication IMO-646E.

** Oil tankers the keels of which are laid, or which are at a similar stage of construction, on or after 1 January 2005 should be fitted with a system approved under resolution MEPC.108(49) (see IMO sales publication IMO …).

.2 computing unit □

.3 calculating unit □

6.1.4 The system is:

.1 fitted with a starting interlock □

.2 fitted with automatic stopping device □

6.1.5 The oil content meter is approved under the terms of resolution A.393(X) or A.586(14)† or MEPC.108(49) *(delete as appropriate)* suitable for:

.1 crude oil □

.2 black products □

.3 white products □

.4 oil-like noxious liquid substances as listed in the attachment to the certificate □

6.1.6 The ship has been supplied with an operations manual for the oil discharge monitoring and control system □

6.2 Slop tanks:

The ship is provided with ..... dedicated slop tank(s) with the total capacity of ..... m^3, which is ..... % of the oil carrying capacity, in accordance with:

.1 regulation 29.2.3 □

.2 regulation 29.2.3.1 □

.3 regulation 29.2.3.2 □

.4 regulation 29.2.3.3 □

6.2.2 Cargo tanks have been designated as slop tanks □

† 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 publication IMO-646E. For oil content meters as part of discharge monitoring and control systems installed on tankers the keel of which are laid or are in a similar stage of construction on or after 1 January 2005, refer to the revised Guidelines and specifications for oil discharge monitoring and control systems for oil tankers adopted by the Organization by resolution MEPC.108(49); see IMO sales publication IMO …. ..

6.3 Oil/water interface detectors:

6.3.1 The ship is provided with oil/water interface detectors approved under the terms of resolution MEPC.5(XIII)* □

6.4 Exemptions from regulations 29, 31 and 32:

6.4.1 The ship is exempted from the requirements of regulations 29, 31 and 32 in accordance with regulation 2.4 □

6.4.2 The ship is exempted from the requirements of regulations 29, 31 and 32 in accordance with regulation 2.2 □

6.5 Waiver of regulation:

6.5.1 The requirements of regulations 31 and 32 are waived in respect of the ship in accordance with regulation 3.5. The ship is engaged exclusively on:

.1 specific trade under regulation 2.5: .....
..... □

.2 voyages within special area(s): .....
..... □

.3 voyages within 50 nautical miles of the nearest land outside special area(s) of 72 hours or less in duration restricted to: .....
..... □

7. Pumping, piping and discharge arrangements
(regulation 30)

7.1 The overboard discharge outlets for segregated ballast are located:

7.1.1. Above the waterline □

7.1.2 Below the waterline □

7.2 The overboard discharge outlets, other than the discharge manifold, for clean ballast are located†:

7.2.1 Above the waterline □

7.2.2 Below the waterline □

7.3 The overboard discharge outlets, other than the discharge manifold,

---

* Refer to the Specification 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.

† Only those outlets which can be monitored are to be indicated.

for dirty ballast water or oil-contaminated water from cargo tank areas are located:

7.3.1 Above the waterline □

7.3.2 Below the waterline in conjunction with the part flow arrangements in compliance with regulation 30.6.5 □

7.3.3 Below the waterline □

7.4 Discharge of oil from cargo pumps and oil lines (regulations 30.4 and 30.5):

7.4.1 Means to drain all cargo pumps and oil lines at the completion of cargo discharge:

.1 drainings capable of being discharged to a cargo tank or slop tank □

.2 for discharge ashore a special small-diameter line is provided □

8. Shipboard oil/marine pollution emergency plan (regulation 37)

8.1 The ship is provided with a shipboard oil pollution emergency plan in compliance with regulation 37 □

8.2 The ship is provided with a shipboard marine pollution emergency plan in compliance with regulation 37.3 □

9. Exemption

9.1 Exemptions have been granted by the Administration from the requirements of chapter 3 of Annex I of the Convention in accordance with regulation 3.1 on those items listed under paragraph(s) .... of this Record □

10. Equivalents (regulation 5)

10.1 Equivalents have been approved by the Administration for certain requirements of Annex I on those items listed under paragraph(s) ..... of this Record □

THIS IS TO CERTIFY that this Record is correct in all respects.
Issued at …….

(Place of issue of the Record)

…… ……
(Signature of duly authorized official issuing the Record)

(Seal or stamp of the issuing authority, as appropriate)

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 150 gross tonnage and above and every ship of 400 gross tonnage and above, other than oil tankers, to record relevant machinery space operations. For oil tankers, Oil Record Book Part II 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 Part I in accordance with regulation 17 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78). The items have been grouped into operational sections, each of which is denoted by a letter Code.

When making entries in the Oil Record Book Part I, 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. The master of the Ship shall sign each completed page.

The Oil Record Book Part I 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 Part I should be considered accordingly.

In the event of accidental or other exceptional discharge of oil statement shall be made in the Oil Record Book Part I of the circumstances of, and the reasons for, the discharge.

Any failure of the oil filtering equipment shall be noted in the Oil Record Book Part I.

The entries in the Oil Record Book Part I, for ships holding an IOPP Certificate, shall be at least in English, French or Spanish. Where entries in official language of the State whose flag the ship is entitled to fly are also used, this shall prevail in case of a dispute or discrepancy.

The Oil Record Book Part I 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.

The competent authority of the Government of a Party to the Convention may inspect the Oil Record Book Part I 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 Oil Record Book Part I shall be made admissible in any juridical proceedings as evidence of the facts stated in the entry. The inspection of an Oil Record Book Part I 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.

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, in m^3);

   .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, in m^3.

(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 15 ppm equipment

   .2 to reception facilities.

10. Quantity discharged, in m^3.

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

11. Collection of oil residues

Quantities of oil residues (sludge and other oil residues) retained on board. The quantity should be recorded weekly[1]: (This means that the quantity must be recorded once a week even if the voyage lasts more than one week)

.1 - identity of tank(s) ……

.2 - capacity of tank(s) ……..…… m^3

.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 in m^3:

.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, in cubic metres.[3]

14. Time of discharge or disposal (starts and stop).

15. Method of discharge or disposal:

.1 through 15 ppm equipment (state position at start and end);

.2 to reception facilities (identify port)[2];

---

1 Tanks listed in item 3.1 of form A and B of the supplement in the IOPP Certificate used for sludge.

2 Ship's masters should obtain from the operator of the reception facilities, which includes 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 Part I, 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 Part I.

3 In case of discharge or disposal of bilge water from holding tank(s), state identity and capacity of holding tank(s) and quantity retained in holding tank.

.3 transfer to slop tank or holding tank (indicate tank(s); state the total quantity retained in tank(s), in m^3).

(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, through 15 ppm equipment.

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.

(F) Condition of the oil filtering equipment

19. Time of system failure[4].

20. Time when system has been made operational.

21. Reasons for failure.

(G) Accidental or other exceptional discharges of oil

22. Time of occurrence.

23. Place or position of ship at time of occurrence.

24. Approximate quantity and type of oil.

25. Circumstances of discharge or escape, the reasons therefore and general remarks.

(H) Bunkering of fuel or bulk lubricating oil

26. Bunkering:

.1 Place of bunkering.

.2 Time of bunkering.

.3 Type and quantity of fuel oil and identity of tank(s) (state quantity added, in tonnes and total content of tank(s)).

.4 Type and quantity of lubricating oil and identity of tank(s) (state quantity added, in tonnes and total content of tank (s)).

[4] The condition of the oil filtering equipment covers also the alarm and automatic stopping devices, if applicable.

(I) Additional operational procedures and general remarks

Name of ship .....

Distinctive number or letters .....

MACHINERY SPACE OPERATIONS

Date	**Code** (letter)	**Item** (number)	**Record of operations/signature of officer in charge**

Signature of master .....

OIL RECORD BOOK

PART II – Cargo / Ballast Operations

(Oil Tankers)

Name of Ship: .....

Distinctive number
or letters: .....

Gross tonnage: .....

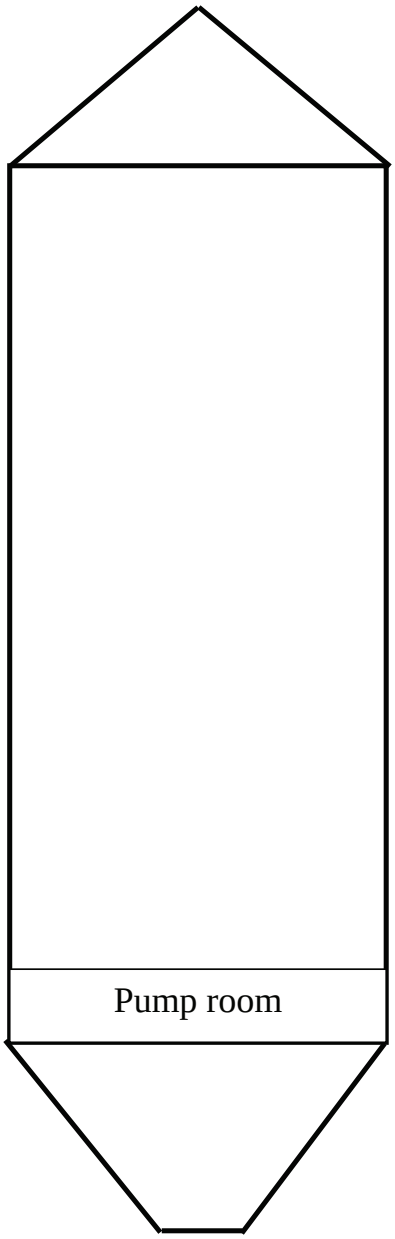
Period from: ..... to: .....

Note: Every oil tanker of 150 gross tonnage and above shall be provided with Oil Record Book Part II 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.

Name of Ship ……

Distinctive number or letters …….

PLAN VIEW OF CARGO AND SLOP TANKS
(to be completed on board)



Identification of tanks	Capacity
Depth of slop tank(s):	

(Give the capacity of each tank and the depth of slop tank(s))

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 Part II in accordance with regulation 36 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 section, each of which is denoted by a code letter.

When making entries in the Oil Record Book Part II, 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 2.5 of Annex I of MARPOL 73/78, appropriate entry in the Oil Record Book Part II shall be endorsed by the competent port State authority.*

The Oil Record Book Part II 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 Part II should be considered accordingly.

In the event of accidental or other exceptional discharge of oil a statement shall be made in the Oil Record Book Part II of the circumstances of, and the reasons for, the discharge.

Any failure of the oil discharge monitoring and control system shall be noted in the Oil Record Book Part II.

The entries in the Oil Record Book Part II, for ships holding an IOPP Certificate, shall be at least in English, French or Spanish. Where entries in an official language of the State whose flag the ship is entitled to fly are also used, this shall prevail in case of a dispute or discrepancy.

The Oil Record Book Part II 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.

The competent authority of the Government of a Party to the Convention may inspect the Oil Record Book Part II 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 Oil Record Book Part II shall be made admissible in any juridical proceedings as evidence of the facts stated in the entry. The inspection of an Oil Record Book Part II and 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.

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

LIST OF ITEMS TO BE RECORDED

(A) Loading of oil cargo

1. Place of loading.

2. Type of oil loaded and identity of tank(s).

3. Total quantity of oil loaded (state quantity added, in m^3 at 15^oC and the total content of tank(s), in m^3).

(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), in m^3).

5. Was (were) the tank(s) in 4.1 emptied? (If not, state quantity retained, in m^3.)

(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, in m^3.)

(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.

---

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

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

15. Time washing was completed or stopped.

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

17. Remarks.[3]

(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; and

.3 quantity of ballast received. Indicate total quantity of ballast for each tank involved in operation, in m^3.

(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 total quantity, in m^3.

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, in m^3.

(G) Cleaning of cargo tanks

27. Identity of tank(s) cleaned.

28. Port or ship's position.

29. Duration of cleaning.

---

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

30. Method of cleaning.[4]

31. Tank washings transferred to:

.1 reception facilities (state port and quantity, in m^3)[5]; and

.2 sloptank(s) or cargo tank(s) designated as sloptank(s) (identify tank(s); state quantity transferred and total quantity, in m^3).

(H) Discharge of dirty ballast

32. Identity of tank(s).

33. Time and position of ship at start of discharge into the sea.

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

35. Quantity discharged into the sea, in m^3.

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, in m^3.

40. Discharged to shore reception facilities (identify port and quantity involved, in m^3).[5]

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

41. Identity of slop tanks.

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

43. Time of settling from last discharge.

---

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

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

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, in m^3 and rate of discharge, in m^3 /hour.

48. Final quantity discharged, in m^3 and rate of discharge, in m^3/hour.

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, in metres.

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

53. Was regular check kept on the effluent and the surface of 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 tanks.

56. Quantity disposed of from each tank. (State the quantity retained, in m^3.)

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), in m^3); and

.4 other method (state which); state quantity disposed of, in m^3.

(K) Discharge of clean ballast contained in cargo tanks

58. Position of ship at start of clean ballast.

---

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

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, in m^3:

.1 into the sea; or

.2 to reception facility (identify port).[5]

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.

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

75. Approximate quantity, in m^3, and type of oil.

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

(O) Additional operational procedures and general remarks

TANKERS ENGAGED IN SPECIFIC TRADES

(P) Loading of ballast water

77. Identity of tank(s) ballasted.

78. Position of ship when ballasted.

79. Total quantity of ballast loaded in cubic metres.

80. Remarks.

(Q) Re-allocation of ballast water within the ship

81. Reason for re-allocation.

(R) Ballast water discharge to reception facility

82. Port(s) where ballast water was discharged.

83. Name or designation of reception facility.

84. Total quantity of ballast water discharged in cubic metres.

85. Date, signature and stamp of port authority official.

Name of ship .....

Distinctive number or letters .....

CARGO/BALLAST OPERATIONS (OIL TANKERS)

Date	**Code** (letter)	**Item** (number)	**Record of operations/signature of officer in charge**

Signature of master .....

_____

ANNEX 2

RESOLUTION MEPC.141(54)

Adopted on 24 March 2006

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Amendments to regulation 1, addition to regulation 12A, consequential amendments to the IOPP Certificate and amendments to regulation 21 of the revised Annex I of MARPOL 73/78)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

NOTING ALSO that the revised Annex I to MARPOL 73/78 was adopted by resolution MEPC.117(52) and is expected to enter into force on 1 January 2007,

HAVING CONSIDERED proposed amendments to regulation 1, proposed new regulation 12A, consequential amendments to the Supplement (Forms A and B) of the IOPP Certificate, and proposed amendments to regulation 21 of the revised Annex I to MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to the revised Annex I of MARPOL 73/78, the text of which is set out at Annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 February 2007, unless prior to that date, not less than one-third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 August 2007 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the Annex; and

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its Annex.

ANNEX

AMENDMENTS TO THE REVISED MARPOL ANNEX I

1 Addition of paragraph 28.9 to regulation 1

The following new paragraph 28.9 is added after the existing paragraph 28.8 of regulation 1:

"28.9 ship delivered on or after 1 August 2010 means a ship:

.1 for which the building contract is placed on or after 1 August 2007; or

.2 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 1 February 2008; or

.3 the delivery of which is on or after 1 August 2010; or

.4 which have undergone a major conversion:

.1 for which the contract is placed after 1 August 2007; or

.2 in the absence of contract, the construction work of which is begun after 1 February 2008; or

.3 which is completed after 1 August 2010."

2 Addition of new regulation 12A on oil fuel tank protection

The following new regulation 12A is added after the existing regulation 12:

"Regulation 12A – Oil fuel tank protection

1 This regulation shall apply to all ships with an aggregate oil fuel capacity of 600 m^3 and above which are delivered on or after 1 August 2010, as defined in regulation 1.28.9 of this Annex.

2 The application of this regulation in determining the location of tanks used to carry oil fuel does not govern over the provisions of regulation 19 of this Annex.

3 For the purpose of this regulation, the following definitions shall apply:

.1 "Oil fuel" means any oil used as fuel oil in connection with the propulsion and auxiliary machinery of the ship in which such oil is carried.

.2 "Load line draught (d_S)" is the vertical distance, in metres, from the moulded baseline at mid-length to the waterline corresponding to the summer freeboard draught to be assigned to the ship.

.3 “Light ship draught” is the moulded draught amidships corresponding to the lightweight.

.4 “Partial load line draught (d_P)” is the light ship draught plus 60% of the difference between the light ship draught and the load line draught d_S. The partial load line draught (d_p) shall be measured in metres.

.5 “Waterline (d_B)” is the vertical distance, in metres, from the moulded baseline at mid-length to the waterline corresponding to 30% of the depth D_S.

.6 “Breadth (B_S)” is the greatest moulded breadth of the ship, in metres, at or below the deepest load line draught (d_S).

.7 “Breadth (B_B)” is the greatest moulded breadth of the ship, in metres, at or below the waterline (d_B).

.8 “Depth (D_S)” is the moulded depth, in metres, measured at mid-length to the upper deck at side. For the purpose of the application, “upper deck” means the highest deck to which the watertight transverse bulkheads except aft peak bulkheads extend.

.9 “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.

.10 “Breadth (B)” means the maximum breadth of the ship, in metres, 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.

.11 “Oil fuel tank” means a tank in which oil fuel is carried, but excludes those tanks which would not contain oil fuel in normal operation, such as overflow tanks.

.12 “Small oil fuel tank” is an oil fuel tank with a maximum individual capacity not greater than 30 m^3.

.13 “C” is the ship’s total volume of oil fuel, including that of the small oil fuel tanks, in m^3, at 98% tank filling.

.14 “Oil fuel capacity” means the volume of a tank in m^3, at 98% filling.

4 The provisions of this regulation shall apply to all oil fuel tanks except small oil fuel tanks, as defined in 3.12, provided that the aggregate capacity of such excluded tanks is not greater than 600 m^3.

5 Individual oil fuel tanks shall not have a capacity of over 2,500 m^3.

6 For ships, other than self-elevating drilling units, having an aggregate oil fuel capacity of 600 m^3 and above, oil fuel tanks shall be located above the moulded line of the bottom shell plating nowhere less than the distance h as specified below:

h = B/20 m or,

h = 2.0 m, whichever is the lesser.

The 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 oil fuel tank boundary line shall run parallel to the line of the midship flat bottom as shown in Figure 1.

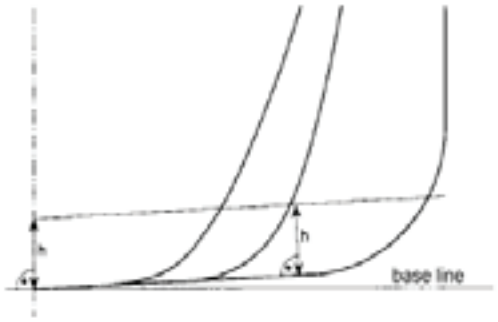

Figure 1 – Oil fuel tank boundary lines for the purpose of paragraph 6

7 For ships having an aggregate oil fuel capacity of 600 m^3 or more but less than 5,000 m^3, oil fuel tanks shall be located inboard of the moulded line of the side shell plating, nowhere less than the distance w which, as shown in Figure 2, is measured at any cross-section at right angles to the side shell, as specified below:

w = 0.4 + 2.4 C/20,000 m

The minimum value of w = 1.0 m, however for individual tanks with an oil fuel capacity of less than 500 m^3 the minimum value is 0.76 m.

8 For ships having an aggregate oil fuel capacity of 5,000 m^3 and over, oil fuel tanks shall be located inboard of the moulded line of the side shell plating, nowhere less than the distance w which, as shown in Figure 2, is measured at any cross-section at right angles to the side shell, as specified below:

w = 0.5 + C/20,000 m or

w = 2.0 m, whichever is the lesser.

The minimum value of w = 1.0 m

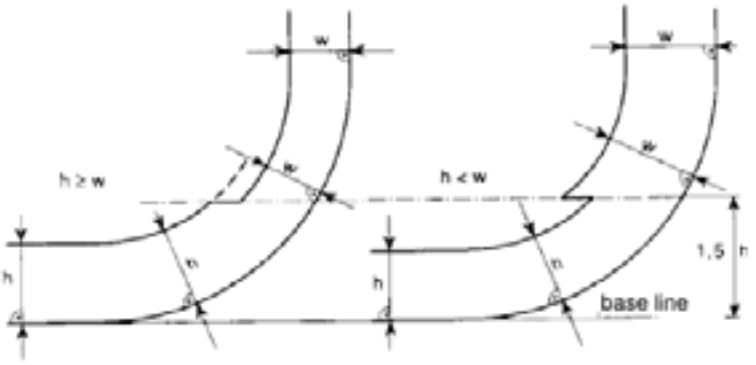

Figure 2 – Oil fuel tank boundary lines for the purpose of paragraphs 7 and 8

9 Lines of oil fuel piping located at a distance from the ship's bottom of less than *h*, as defined in paragraph 6, or from the ship's side less than *w*, as defined in paragraphs 7 and 8 shall be fitted with valves or similar closing devices within or immediately adjacent to the oil fuel tank. These valves shall be capable of being brought into operation from a readily accessible enclosed space the location of which is accessible from the navigation bridge or propulsion machinery control position without traversing exposed freeboard or superstructure decks. The valves shall close in case of remote control system failure (fail in a closed position) and shall be kept closed at sea at any time when the tank contains oil fuel except that they may be opened during oil fuel transfer operations.

10 Suction wells in oil fuel 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 the bottom shell plating is not less than 0.5 h.

11 Alternatively to paragraphs 6 and either 7 or 8, ships shall comply with the accidental oil fuel outflow performance standard specified below:

.1 The level of protection against oil fuel pollution in the event of collision or grounding shall be assessed on the basis of the mean oil outflow parameter as follows:

$O_M < 0.0157\text{-}1.14E\text{-}6 \cdot C$ $\quad 600\ m^3 \leq C < 5{,}000\ m^3$

$O_M < 0.010$ $\quad C \geq 5{,}000\ m^3$

Where O_M = mean oil outflow parameter;
C = total oil fuel volume.

.2 The following general assumption shall apply when calculating the mean oil outflow parameter:

.1 the ship shall be assumed loaded to the partial load line draught d_P without trim or heel;

.2 all oil fuel tanks shall be assumed loaded to 98% of their volumetric capacity;

.3 the nominal density of the oil fuel (ρ_n) shall generally be taken as 1,000 kg/m^3. If the density of the oil fuel is specifically restricted to a lesser value, the lesser value may be applied; and

.4 for the purpose of these outflow calculations, the permeability of each oil fuel tank shall be taken as 0.99, unless proven otherwise.

.3 The following assumptions shall be used when combining the oil outflow parameters:

.1 The mean oil outflow shall be calculated independently for side damage and for bottom damage and then combined into a non-dimensional oil outflow parameter O_M, as follows:

$$O_M = (0.4\ O_{MS} + 0.6\ O_{MB}) / C$$

where:

O_{MS} = mean outflow for side damage, in m^3
O_{MB} = mean outflow for bottom damage, in m^3
C = total oil fuel volume.

.2 For bottom damage, independent calculations for mean outflow shall be done for 0 m and 2.5 m tide conditions, and then combined as follows:

$$O_{MB} = 0.7\ O_{MB(0)} + 0.3\ O_{MB(2.5)}$$

where:

$O_{MB(0)}$ = mean outflow for 0 m tide condition, and
$O_{MB(2.5)}$ = mean outflow for minus 2.5 m tide condition, in m^3.

.4 The mean outflow for side damage O_{MS} shall be calculated as follows:

$$O_{MS} = \sum_{1}^{n} P_{S(i)}\ O_{S(i)} \quad [m^3]$$

where:

i = represents each oil fuel tank under consideration;
n = total number of oil fuel tanks;
$P_{S(i)}$ = the probability of penetrating oil fuel tank i from side damage, calculated in accordance with paragraph 11.6 of this regulation;
$O_{S(i)}$ = the outflow, in m^3, from side damage to oil fuel tank i, which is assumed equal to the total volume in oil fuel tank i at 98% filling.

.5 The mean outflow for bottom damage shall be calculated for each tidal condition as follows:

.1 $O_{MB(0)} = \sum_{1}^{n} P_{B(i)} O_{B(i)} C_{DB(i)}$ [m^3]

where:

i = represents each oil fuel tank under consideration;
n = total number of oil fuel tanks;
$P_{B(i)}$ = the probability of penetrating oil fuel tank i from bottom damage, calculated in accordance with paragraph 11.7 of this regulation;
$O_{B(i)}$ = the outflow from oil fuel tank i, in m^3, calculated in accordance with paragraph 11.5.3 of this regulation; and
$C_{DB(i)}$ = factor to account for oil capture as defined in paragraph 11.5.4.

.2 $O_{MB(2.5)} = \sum_{1}^{n} P_{B(i)} O_{B(i)} C_{DB(i)}$ [m^3]

where:

i, n, $P_{B(i)}$ and $C_{DB(i)}$ = as defined in subparagraph .1 above
$O_{B(i)}$ = the outflow from oil fuel tank i, in m^3, after tidal change.

.3 The oil outflow $O_{B(i)}$ for each oil fuel tank shall be calculated based on pressure balance principles, in accordance with the following assumptions:

.1 The ship shall be assumed stranded with zero trim and heel, with the stranded draught prior to tidal change equal to the partial load line draught d_P.

.2 The oil fuel level after damage shall be calculated as follows:

$h_F = \{(d_P + t_C - Z_l)(\rho_S)\}/\rho_n$

where: h_F = the height of the oil fuel surface above Z_l, in m;
t_C = the tidal change, in m. Reductions in tide shall be expressed as negative values;
Z_l = the height of the lowest point in the oil fuel tank above the baseline, in m;
ρ_S = density of seawater, to be taken as 1,025 kg/m^3; and,
ρ_n = nominal density of the oil fuel, as defined in 11.2.3.

.3 The oil outflow $O_{B(i)}$ for any tank bounding the bottom shell plating shall be taken not less than the following formula, but no more than the tank capacity:

$O_{B(i)} = H_W \cdot A$

where:

H_W = 1.0 m, when $Y_B = 0$

H_W = $B_B/50$ but not greater than 0.4 m, when Y_B is greater than $B_B/5$ or 11.5 m, whichever is less

"H_W" is to be measured upwards from the midship flat bottom line. In the turn of the bilge area and at locations without a clearly defined turn of the bilge, H_W is to be measured from a line parallel to the midship flat bottom, as shown for distance "h" in Figure 1.

For Y_B values outboard $B_B/5$ or 11.5 m, whichever is less, H_W is to be linearly interpolated.

Y_B = the minimum value of Y_B over the length of the oil fuel tank, where at any given location, Y_B is the transverse distance between the side shell at waterline d_B and the tank at or below waterline d_B.

A = the maximum horizontal projected area of the oil fuel tank up to the level of H_W from the bottom of the tank.

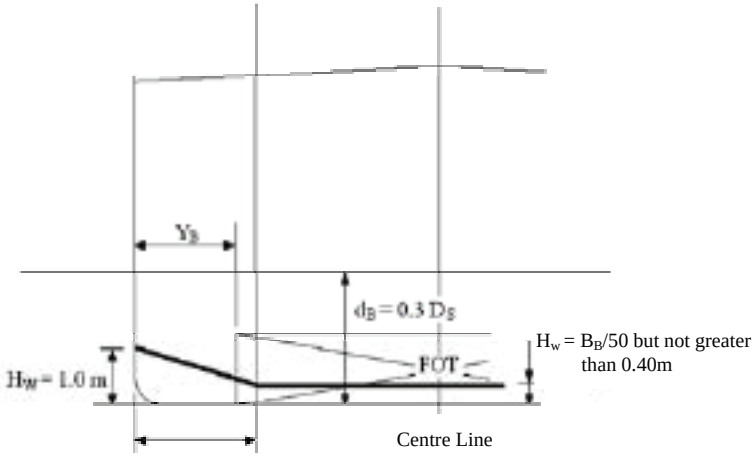

Figure 3 – Dimensions for calculation of the minimum oil outflow for the purpose of subparagraph 11.5.3.3

.4 In the case of bottom damage, a portion from the outflow from an oil fuel tank may be captured by non-oil compartments. This effect is approximated by application of the factor $C_{DB(i)}$ for each tank, which shall be taken as follows:

$C_{DB(i)}$ = 0.6 for oil fuel tanks bounded from below by non-oil compartments;

$C_{DB(i)}$ = 1 otherwise.

.6 The probability P_S of breaching a compartment from side damage shall be calculated as follows:

.1 $P_S = P_{SL} \cdot P_{SV} \cdot P_{ST}$

where: P_{SL} = $(1 – P_{Sf} – P_{Sa})$ = probability the damage will extend into the longitudinal zone bounded by X_a and X_f;
P_{SV} = $(1 – P_{Su} – P_{Sl})$ = probability the damage will extend into the vertical zone bounded by Z_l and Z_u;
P_{ST} = $(1 – P_{Sy})$ = probability the damage will extend transversely beyond the boundary defined by y;

.2 P_{Sa}, P_{Sf}, P_{Su} and P_{Sl} shall be determined by linear interpolation from the table of probabilities for side damage provided in 11.6.3, and P_{Sy} shall be calculated from the formulas provided in 11.6.3, where:

P_{Sa} = the probability the damage will lie entirely aft of location X_a/L;
P_{Sf} = the probability the damage will lie entirely forward of location X_f/L;
P_{Sl} = probability the damage will lie entirely below the tank;
P_{Su} = probability the damage will lie entirely above the tank; and
P_{Sy} = probability the damage will lie entirely outboard the tank.

Compartment boundaries X_a, X_f, Z_l, Z_u and y shall be developed as follows:

X_a = the longitudinal distance from aft terminal of L to the aft most point on the compartment being considered, in m;
X_f = the longitudinal distance from aft terminal of L to the foremost point on the compartment being considered, in m;
Z_l = the vertical distance from the moulded baseline to the lowest point on the compartment being considered, in m. Where Z_l is greater than D_S, Z_l shall be taken as D_S;
Z_u = the vertical distance from the moulded baseline to the highest point on the compartment being considered, in m. Where Z_u is greater than D_S, Z_u shall be taken as D_S; and,

y = the minimum horizontal distance measured at right angles to the centreline between the compartment under consideration and the side shell, in m[1].

In way of the turn of the bilge, y need not to be considered below a distance h above baseline, where h is lesser of B/10, 3 m or the top of the tank.

.3 Table of Probabilities for side damage

X_a/L	P_{Sa}		X_f/L	P_{Sf}		Z_l/D_S	P_{Sl}		Z_u/D_S	P_{Su}
0,00	0,000		0,00	0,967		0,00	0,000		0,00	0,968
0,05	0,023		0,05	0,917		0,05	0,000		0,05	0,952
0,10	0,068		0,10	0,867		0,10	0,001		0,10	0,931
0,15	0,117		0,15	0,817		0,15	0,003		0,15	0,905
0,20	0,167		0,20	0,767		0,20	0,007		0,20	0,873
0,25	0,217		0,25	0,717		0,25	0,013		0,25	0,836
0,30	0,267		0,30	0,667		0,30	0,021		0,30	0,789
0,35	0,317		0,35	0,617		0,35	0,034		0,35	0,733
0,40	0,367		0,40	0,567		0,40	0,055		0,40	0,670
0,45	0,417		0,45	0,517		0,45	0,085		0,45	0,599
0,50	0,467		0,50	0,467		0,50	0,123		0,50	0,525
0,55	0,517		0,55	0,417		0,55	0,172		0,55	0,452
0,60	0,567		0,60	0,367		0,60	0,226		0,60	0,383
0,65	0,617		0,65	0,317		0,65	0,285		0,65	0,317
0,70	0,667		0,70	0,267		0,70	0,347		0,70	0,255
0,75	0,717		0,75	0,217		0,75	0,413		0,75	0,197
0,80	0,767		0,80	0,167		0,80	0,482		0,80	0,143
0,85	0,817		0,85	0,117		0,85	0,553		0,85	0,092
0,90	0,867		0,90	0,068		0,90	0,626		0,90	0,046
0,95	0,917		0,95	0,023		0,95	0,700		0,95	0,013
1,00	0,967		1,00	0,000		1,00	0,775		1,00	0,000

P_{Sy} shall be calculated as follows:

$P_{Sy} = (24.96 – 199.6\ y/B_S)\ (y/B_S)$ for $y/B_S \leq 0.05$

$P_{Sy} = 0.749 + \{5 – 44.4\ (y/B_S – 0.05)\}\ \{(y/B_S) – 0.05\}$ for $0.05 < y/B_S < 0.1$

$P_{Sy} = 0.888 + 0.56\ (\ y/B_S\ -0.1)$ for $y/B_S \geq 0.1$

P_{Sy} is not to be taken greater than 1.

.7 The probability P_B of breaching a compartment from bottom damage shall be calculated as follows:

[1] For symmetrical tank arrangements, damages are considered for one side of the ship only, in which case all “y” dimensions are to be measured from that side. For asymmetrical arrangements reference is made to the Explanatory Notes on matters related to the accidental oil outflow performance, adopted by the Organization by resolution MEPC.122(52).

.1 $P_B = P_{BL} \cdot P_{BT} \cdot P_{BV}$

where: P_{BL} = $(1 – P_{Bf} – P_{Ba})$ = probability the damage will extend into the longitudinal zone bounded by X_a and X_f;
P_{BT} = $(1 – P_{Bp} – P_{Bs})$ = probability the damage will extend into transverse zone bounded by Y_p and Y_s; and
P_{BV} = $(1 – P_{Bz})$ = probability the damage will extend vertically above the boundary defined by z;

.2 P_{Ba}, P_{Bf}, P_{Bp} and P_{Bs} shall be determined by linear interpolation from the table of probabilities for bottom damage provided in 11.7.3, and P_{Bz} shall be calculated from the formulas provided in 11.7.3, where:

P_{Ba} = the probability the damage will lie entirely aft of location X_a/L;
P_{Bf} = the probability the damage will lie entirely forward of location X_f/L;
P_{Bp} = probability the damage will lie entirely to port of the tank;
P_{Bs} = probability the damage will lie entirely to starboard the tank; and
P_{Bz} = probability the damage will lie entirely below the tank.

Compartment boundaries X_a, X_f, Y_p, Y_s and z shall be developed as follows:

X_a and X_f as defined in 11.6.2;

Y_p = the transverse distance from the port-most point on the compartment located at or below the waterline d_B, to a vertical plane located $B_B/2$ to starboard of the ship’s centreline;

Y_s = the transverse distance from the starboard-most point on the compartment located at or below the waterline d_B, to a vertical plane located $B_B/2$ to starboard of the ship’s centreline; and

z = the minimum value of z over the length of the compartment, where, at any given longitudinal location, z is the vertical distance from the lower point of the bottom shell at that longitudinal location to the lower point of the compartment at that longitudinal location.

.3 Table of probabilities for bottom damage

X_a/L	P_{Ba}		X_f/L	P_{Bf}		Y_p/B_B	P_{Bp}		Y_s/B_B	P_{Bs}
0,00	0,000		0,00	0,969		0,00	0,844		0,00	0,000
0,05	0,002		0,05	0,953		0,05	0,794		0,05	0,009
0,10	0,008		0,10	0,936		0,10	0,744		0,10	0,032
0,15	0,017		0,15	0,916		0,15	0,694		0,15	0,063
0,20	0,029		0,20	0,894		0,20	0,644		0,20	0,097
0,25	0,042		0,25	0,870		0,25	0,594		0,25	0,133
0,30	0,058		0,30	0,842		0,30	0,544		0,30	0,171
0,35	0,076		0,35	0,810		0,35	0,494		0,35	0,211
0,40	0,096		0,40	0,775		0,40	0,444		0,40	0,253
0,45	0,119		0,45	0,734		0,45	0,394		0,45	0,297
0,50	0,143		0,50	0,687		0,50	0,344		0,50	0,344
0,55	0,171		0,55	0,630		0,55	0,297		0,55	0,394
0,60	0,203		0,60	0,563		0,60	0,253		0,60	0,444
0,65	0,242		0,65	0,489		0,65	0,211		0,65	0,494
0,70	0,289		0,70	0,413		0,70	0,171		0,70	0,544
0,75	0,344		0,75	0,333		0,75	0,133		0,75	0,594
0,80	0,409		0,80	0,252		0,80	0,097		0,80	0,644
0,85	0,482		0,85	0,170		0,85	0,063		0,85	0,694
0,90	0,565		0,90	0,089		0,90	0,032		0,90	0,744
0,95	0,658		0,95	0,026		0,95	0,009		0,95	0,794
1,00	0,761		1,00	0,000		1,00	0,000		1,00	0,844

P_{Bz} shall be calculated as follows:

$P_{Bz} = (14.5 – 67\ z/D_S)\ (z/D_S)$ for $z/D_S \leq 0.1$
$P_{Bz} = 0.78 + 1.1\ \{(z/D_S - 0.1)\}$ for $z/D_S > 0.1$
P_{Bz} is not to be taken greater than 1.

.8 For the purpose of maintenance and inspection, any oil fuel tanks that do not border the outer shell plating shall be located no closer to the bottom shell plating than the minimum value of *h* in paragraph 6 and no closer to the side shell plating than the applicable minimum value of *w* in paragraph 7 or 8.

12 In approving the design and construction of ships to be built in accordance with this regulation, Administrations shall have due regard to the general safety aspects, including the need for maintenance and inspection of wing and double bottom tanks or spaces."

3 Consequential amendments to the Supplement of the IOPP Certificate (Forms A and B)

The following new paragraph 2A is added to the Supplement of the IOPP Certificate (Forms A and B):

"2A.1 The ship is required to be constructed according to regulation 12A and complies with the requirements of:

paragraphs 6 and either 7 or 8 (double hull construction) ☐

paragraph 11 (accidental oil fuel outflow performance). ☐

2A.2 The ship is not required to comply with the requirements of regulation 12A. ☐ ”

4 Amendments to regulation 21

The text of existing paragraph 2.2 of regulation 21 on Prevention of oil pollution from oil tankers carrying heavy grade oil as cargo is replaced by the following:

“oils, other than crude oils, having either a density at 15ºC higher than 900 kg/m^3 or a kinematic viscosity at 50ºC higher than 180 mm^2/s; or”

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ANNEX 11

RESOLUTION MEPC.164(56)

Adopted on 13 July 2007

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Reception facilities outside Special Areas and discharge of sewage)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING Article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED proposed amendments to regulation 38.2.5 of Annex I and regulation 11.1.1 of Annex IV to MARPOL 73/78,

1. ADOPTS, in accordance with Article 16(2)(d) of the 1973 Convention, the amendments to Annex I and Annex IV of MARPOL 73/78, the texts of which are set out at Annex 1 and Annex 2 respectively to the present resolution;

2. DETERMINES, in accordance with Article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 June 2008, unless prior to that date, not less than one-third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with Article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 December 2008 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with Article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the Annexes; and

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its Annexes.

ANNEX 1

AMENDMENTS TO MARPOL ANNEX I

(Reception facilities outside Special Areas)

Regulation 38.2.5 is replaced by the following:

> “all ports in respect of oily bilge waters and other residues that cannot be discharged in accordance with regulations 15 and 34 of this Annex; and”

ANNEX 2

AMENDMENTS TO MARPOL ANNEX IV

(Discharge of sewage)

Regulation 11.1.1 is replaced by the following:

".1 the ship is discharging comminuted and disinfected sewage using a system approved by the Administration in accordance with regulation 9.1.2 of this Annex at a distance of more than 3 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, or sewage originating from spaces containing living animals, 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[8]; or"

***

[8] Refer to the Recommendation on standards for the rate of discharge of untreated sewage from ships adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.157(55).

ANNEX 22

RESOLUTION MEPC.186(59)
Adopted on 17 July 2009

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Addition of a new chapter 8 to MARPOL Annex I and consequential amendments to the Supplement to the IOPP Certificate, Form B)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING Article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED proposed amendments to Annex I of MARPOL 73/78,

1. ADOPTS, in accordance with Article 16(2)(d) of the 1973 Convention, the amendments to Annex I of MARPOL 73/78 concerning the addition of a new chapter 8 and consequential amendments to the Supplement to the IOPP Certificate, Form B, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with Article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2010 unless, prior to that date, not less than one-third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with Article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2011 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with Article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the annex; and

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its annex.

ANNEX

(Addition of a new chapter 8 to MARPOL and Annex I and consequential amendments to the Supplement to the IOPP Certificate, Form B)

1 A new chapter 8 is added:

"**CHAPTER 8 – PREVENTION OF POLLUTION DURING TRANSFER OF OIL CARGO BETWEEN OIL TANKERS AT SEA**

Regulation 40
Scope of application

1 The regulations contained in this chapter apply to oil tankers of 150 gross tonnage and above engaged in the transfer of oil cargo between oil tankers at sea (STS operations) and their STS operations conducted on or after 1 April 2012. However, STS operations conducted before that date but after the approval of the Administration of STS operations Plan required under regulation 41.1 shall be in accordance with the STS operations Plan as far as possible.

2 The regulations contained in this chapter shall not apply to oil transfer operations associated with fixed or floating platforms including drilling rigs; floating production, storage and offloading facilities (FPSOs) used for the offshore production and storage of oil; and floating storage units (FSUs) used for the offshore storage of produced oil[1].

3 The regulations contained in this chapter shall not apply to bunkering operations.

4 The regulations contained in this chapter shall not apply to STS operations necessary for the purpose of securing the safety of a ship or saving life at sea, or for combating specific pollution incidents in order to minimize the damage from pollution.

5 The regulations contained in this chapter shall not apply to STS operations where either of the ships involved is a warship, naval auxiliary or other ship owned or operated by a State and used, for the time being, only on government non-commercial service. However, each State shall ensure, by the adoption of appropriate measures not impairing operations or operational capabilities of such ships that the STS operations are conducted in a manner consistent, so far as is reasonable and practicable, with this chapter.

[1] Revised Annex I of MARPOL, chapter 7 (resolution MEPC.117(52)) and UNCLOS article 56 are applicable and address these operations.

Regulation 41
General Rules on safety and environmental protection

1 Any oil tanker involved in STS operations shall carry on board a Plan prescribing how to conduct STS operations (STS operations Plan) not later than the date of the first annual, intermediate or renewal survey of the ship to be carried out on or after 1 January 2011. Each oil tanker's STS operations Plan shall be approved by the Administration. The STS operations Plan shall be written in the working language of the ship.

2 The STS operations Plan shall be developed taking into account the information contained in the best practice guidelines for STS operations identified by the Organization[2]. The STS operations Plan may be incorporated into an existing Safety Management System required by chapter IX of the International Convention for the Safety of Life at Sea, 1974, as amended, if that requirement is applicable to the oil tanker in question.

3 Any oil tanker subject to this chapter and engaged in STS operations shall comply with its STS operations Plan.

4 The person in overall advisory control of STS operations shall be qualified to perform all relevant duties, taking into account the qualifications contained in the best practice guidelines for STS operations identified by the Organization[3].

5 Records[4] of STS operations shall be retained on board for three years and be readily available for inspection by a Party to the present Convention.

Regulation 42
Notification

1 Each oil tanker subject to this chapter that plans STS operations within the territorial sea, or the exclusive economic zone of a Party to the present Convention shall notify that Party not less than 48 hours in advance of the scheduled STS operations. Where, in an exceptional case, all of the information specified in paragraph 2 is not available not less than 48 hours in advance, the oil tanker discharging the oil cargo shall notify the Party to the present Convention, not less than 48 hours in advance that an STS operation will occur and the information specified in paragraph 2 shall be provided to the Party at the earliest opportunity.

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2 IMO's "Manual on Oil Pollution, Section I, Prevention" as amended, and the ICS and OCIMF "Ship-to-ship Transfer Guide, Petroleum", fourth edition, 2005.

3 IMO's "Manual on Oil Pollution, Section I, Prevention" as amended, and the ICS and OCIMF "Ship-to-ship Transfer Guide, Petroleum", fourth edition, 2005.

4 Revised Annex I of MARPOL chapters 3 and 4 (resolution MEPC.117(52)); requirements for recording bunkering and oil cargo transfer operations in the Oil Record Book, and any records required by the STS operations Plan.

2 The notification specified in paragraph 1 of this regulation[5] shall include at least the following:

.1 name, flag, call sign, IMO Number and estimated time of arrival of the oil tankers involved in the STS operations;

.2 date, time and geographical location at the commencement of the planned STS operations;

.3 whether STS operations are to be conducted at anchor or underway;

.4 oil type and quantity;

.5 planned duration of the STS operations;

.6 identification of STS operations service provider or person in overall advisory control and contact information; and

.7 confirmation that the oil tanker has on board an STS operations Plan meeting the requirements of regulation 41.

3 If the estimated time of arrival of an oil tanker at the location or area for the STS operations changes by more than six hours, the master, owner or agent of that oil tanker shall provide a revised estimated time of arrival to the Party to the present Convention specified in paragraph 1 of this regulation."

2 In the Record of Construction and Equipment for Oil Tankers, Form B, new section 8A is added as follows:

"**8A Ship-to-ship oil transfer operations at sea**
(regulation 41)

8A.1 The oil tanker is provided with an STS operations Plan in compliance with regulation 41."

***

[5] The national operational contact point as listed in document MSC-MEPC.6/Circ.4 of 31 December 2007 or its subsequent amendments.

ANNEX 23

RESOLUTION MEPC.187(59)
Adopted on 17 July 2009

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Amendments to regulations 1, 12, 13, 17 and 38 of MARPOL Annex I, Supplement to the IOPP Certificate and Oil Record Book Parts I and II)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING Article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED proposed amendments to Annex I of MARPOL 73/78,

1. ADOPTS, in accordance with Article 16(2)(d) of the 1973 Convention, the amendments to Annex I of MARPOL 73/78 concerning regulations 1, 12, 13, 17 and 38 and the Supplement to the IOPP Certificate and Oil Record Book Parts I and II, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with Article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2010 unless prior, to that date, not less than one-third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with Article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2011 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with Article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the annex; and

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its annex.

ANNEX

AMENDMENTS TO MARPOL ANNEX I

(Amendments to regulations 1, 12, 13, 17 and 38 of MARPOL Annex I, Supplement to the IOPP Certificate and Oil Record Book Parts I and II)

Annex 1

AMENDMENTS TO REGULATIONS 1, 12, 13, 17 AND 38 OF MARPOL ANNEX I

Regulation 1 – Definitions

1 The following new subparagraphs .31, .32, .33 and .34 are added after existing subparagraph .30:

".31 **Oil residue (sludge)** means the residual waste oil products generated during the normal operation of a ship such as those resulting from the purification of fuel or lubricating oil for main or auxiliary machinery, separated waste oil from oil filtering equipment, waste oil collected in drip trays, and waste hydraulic and lubricating oils.

.32 **Oil residue (sludge) tank means** a tank which holds oil residue (sludge) from which sludge may be disposed directly through the standard discharge connection or any other approved means of disposal.

.33 **Oily bilge water** means water which may be contaminated by oil resulting from things such as leakage or maintenance work in machinery spaces. Any liquid entering the bilge system including bilge wells, bilge piping, tank top or bilge holding tanks is considered oily bilge water.

.34 **Oily bilge water holding tank** means a tank collecting oily bilge water prior to its discharge, transfer or disposal."

Regulation 12 – Tanks for oil residues (sludge)

2 Paragraph 1 is amended to read as follows:

"1 Every ship of 400 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."

3 The following new paragraph 2 is inserted, after the existing paragraph 1:

"2 Oil residue (sludge) may be disposed of directly from the oil residue (sludge) tank(s) through the standard discharge connection referred to in regulation 13, or any other approved means of disposal. The oil residue (sludge) tank(s):

.1 shall be provided with a designated pump for disposal that is capable of taking suction from the oil residue (sludge) tank(s); and

.2 shall have no discharge connections to the bilge system, oily bilge water holding tank(s), tank top or oily water separators except that the tank(s) may be fitted with drains, with manually operated self-closing valves and arrangements for subsequent visual monitoring of the settled water, that lead to an oily bilge water holding tank or bilge well, or an alternative arrangement, provided such arrangement does not connect directly to the bilge piping system."

4 Existing paragraphs 2 and 3 are renumbered 3 and 4, respectively.

Regulations 12, 13, 17 and 38

5 The word "sludge" in regulations 12.2, 13, 17.2.3, 38.2 and 38.7 is replaced by the words "oil residue (sludge)".

6 The words "and other oil residues" in regulation 17.2.3 are deleted.

Annex 2

AMENDMENTS TO THE SUPPLEMENT TO THE IOPP CERTIFICATE FORM A (SHIPS OTHER THAN OIL TANKERS) AND FORM B (OIL TANKERS)

1 The existing Section 3 of the Supplement to the IOPP Certificate, Form A and Form B, is replaced by the following:

"**3 Means for retention and disposal of oil residues (sludge) (regulation 12) and oily bilge water holding tank(s)**[*]

3.1 The ship is provided with oil residue (sludge) tanks for retention of oil residues (sludge) on board as follows:

Tank identification	Tank location		Volume (m^3)
	Frames (from)-(to)	Lateral position	
		Total volume: …… m^3	

3.2 Means for the disposal of oil residues (sludge) retained in oil residue (sludge) tanks:

3.2.1 Incinerator for oil residues (sludge), maximum capacity kW or kcal/h (delete as appropriate) ..... ☐

3.2.2 Auxiliary boiler suitable for burning oil residues (sludge) ..... ☐

3.2.3 Other acceptable means, state which ..... ☐

3.3 The ship is provided with holding tank(s) for the retention on board of oily bilge water as follows:

Tank identification	Tank location		Volume (m^3)
	Frames (from)-(to)	Lateral position	
		Total volume: …… m^3	

"

[*] Oily bilgewater holding tank(s) are not required by the Convention; if such tank(s) are provided they shall be listed in Table 3.3.

2 The term “(double bottom requirements)” at the end of paragraph 5.8.2 of Form B is deleted.

3 Paragraphs 5.8.5 and 5.8.7 are replaced by the following:

“5.8.5 The ship is not subject to regulation 20 (check which box(es) apply):

.1	The ship is less than 5,000 tonnes deadweight	☐
.2	The ship complies with regulation 20.1.2	☐
.3	The ship complies with regulation 20.1.3	☐”

“5.8.7 The ship is not subject to regulation 21 (check which box(es) apply):

.1	The ship is less than 600 tonnes deadweight	☐
.2	The ship complies with regulation 19 (Deadweight tonnes ≥ 5,000)	☐
.3	The ship complies with regulation 21.1.2	☐
.4	The ship complies with regulation 21.4.2 (600 ≤ Deadweight tonnes < 5,000)	☐
.5	The ship does not carry “heavy grade oil” as defined in regulation 21.2 of MARPOL Annex I	☐”

4 Delete paragraph 6.1.5.4 from the Supplement to the International Oil Pollution Prevention Certificate, Form B.

Annex 3

AMENDMENTS TO THE OIL RECORD BOOK PARTS I AND II

1 Sections (A) to (H) of the Oil Record Book Part I are replaced by the following:

"**(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, in m^3);
.3 identity of tank(s) into which cleaning water was transferred and the quantity in m^3.
4 Ballasting:
.1 position of ship and time at start and end of ballasting;
.2 quantity of ballast if tanks are not cleaned, in m^3.

(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 15 ppm equipment;
.2 to reception facilities.
10 Quantity discharged, in m^3.

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

11 Collection of oil residues (sludge).
Quantities of oil residues (sludge) retained on board. The quantity should be recorded weekly[1]: (this means that the quantity must be recorded once a week even if the voyage lasts more than one week):
.1 identity of tank(s)
.2 capacity of tank(s) ..... m^3
.3 total quantity of retention ..... m^3
.4 quantity of residue collected by manual operation ..... m^3
(Operator initiated manual collections where oil residue (sludge) is transferred into the oil residue (sludge) holding tank(s).)

[1] Only those tanks listed in item 3.1 of Forms A and B of the Supplement to the IOPP Certificate used for oil residues (sludge).

12 Methods of transfer or disposal of oil residues (sludge).
State quantity of oil residues transferred or disposed of, the tank(s) emptied and the quantity of contents retained in m^3:
.1 to reception facilities (identify port)[2];
.2 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 starting of discharge overboard, transfer or disposal otherwise of bilge water which has accumulated in machinery spaces

13 Quantity discharged, transferred or disposed of, in m^3.[3]
14 Time of discharge, transfer or disposal (start and stop).
15 Method of discharge, transfer, or disposal:
.1 through 15 ppm equipment (state position at start and end);
.2 to reception facilities (identify port)[2];
.3 to slop tank or holding tank or other tank(s) (indicate tank(s); state quantity retained in tank(s), in m^3).

(E) Automatic starting of discharge overboard, transfer 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, through 15 ppm equipment.
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.

(F) Condition of the oil filtering equipment

19 Time of system failure[4].
20 Time when system has been made operational.
21 Reasons for failure.

(G) Accidental or other exceptional discharges of oil

22 Time of occurrence.
23 Place or position of ship at time of occurrence.
24 Approximate quantity and type of oil.
25 Circumstances of discharge or escape, the reasons therefor and general remarks.

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2 The ship's master should obtain from the operator of the reception facilities, which includes 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 Part I, may aid the master of the ship in proving that the ship was not involved in an alleged pollution incident. The receipt or certificate should be kept together with the Oil Record Book Part I.

3 In case of discharge or disposal of bilge water from holding tank(s), state identity and capacity of holding tank(s) and quantity retained in holding tank.

4 The condition of the oil filtering equipment covers also the alarm and automatic stopping devices, if applicable.

(H) Bunkering of fuel or bulk lubricating oil

26 Bunkering:
- .1 Place of bunkering.
- .2 Time of bunkering.
- .3 Type and quantity of fuel oil and identity of tank(s) (state quantity added, in tonnes and total content of tank(s)).
- .4 Type and quantity of lubricating oil and identity of tank(s) (state quantity added, in tonnes and total content of tank(s)).”

2 Section (J) of the Oil Record Book Part II is replaced by the following:

“**(J) Collection, transfer and disposal of residues and oily mixtures not otherwise dealt with**

55 Identity of tanks.
56 Quantity transferred or disposed of from each tank. (State the quantity retained, in m^3.)
57 Method of transfer or disposal:
- .1 disposal to reception facilities (identify port and quantity involved);
- .2 mixed with cargo (state quantity);
- .3 transferred to or from (an)other tank(s) including transfer from machinery space oil residue (sludge) and oily bilge water tanks (identify tank(s); state quantity transferred and total quantity in tank(s), in m^3); and
- .4 other method (state which); state quantity disposed of in m^3.”

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ANNEX 10

RESOLUTION MEPC.189(60)
Adopted on 26 March 2010

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Addition of a new chapter 9 to MARPOL Annex I)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING Article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED draft amendments to Annex I of MARPOL 73/78,

1. ADOPTS, in accordance with Article 16(2)(d) of the 1973 Convention, the amendments to Annex I of MARPOL 73/78 concerning the addition of a new chapter 9 on Special requirements for the use or carriage of oils in the Antarctic area;

2. DETERMINES, in accordance with Article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 February 2011 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with Article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 August 2011 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with Article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the annex; and

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its annex.

ANNEX

AMENDMENTS TO MARPOL ANNEX I TO ADD CHAPTER 9 – SPECIAL REQUIREMENTS FOR THE USE OR CARRIAGE OF OILS IN THE ANTARCTIC AREA

A new chapter 9 is added as follows:

"**CHAPTER 9 – SPECIAL REQUIREMENTS FOR THE USE OR CARRIAGE OF OILS IN THE ANTARCTIC AREA**

Regulation 43
Special requirements for the use or carriage of oils in the Antarctic area

1 With the exception of vessels engaged in securing the safety of ships or in a search and rescue operation, the carriage in bulk as cargo or carriage and use as fuel of the following:

.1 crude oils having a density at 15°C higher than 900 kg/m^3;

.2 oils, other than crude oils, having a density at 15°C higher than 900 kg/m^3 or a kinematic viscosity at 50°C higher than 180 mm^2/s; or

.3 bitumen, tar and their emulsions,

shall be prohibited in the Antarctic area, as defined in Annex I, regulation 1.11.7.

2 When prior operations have included the carriage or use of oils listed in paragraphs 1.1 to 1.3 of this regulation, the cleaning or flushing of tanks or pipelines is not required."

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ANNEX 11

RESOLUTION MEPC.190(60)
Adopted on 26 March 2010

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1997 TO AMEND THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO

(North American Emission Control Area)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention"), article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") and article 4 of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (herein after referred to as the "1997 Protocol"), which together specify the amendment procedure of the 1997 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 and 1997 Protocols,

NOTING ALSO that, by the 1997 Protocol, Annex VI entitled Regulations for the Prevention of Air Pollution from Ships was added to the 1973 Convention (hereinafter referred to as "Annex VI"),

NOTING FURTHER that the revised Annex VI was adopted by resolution MEPC.176(58) and that, following its deemed acceptance on 1 January 2010, will enter into force on 1 July 2010,

HAVING CONSIDERED draft amendments to the revised Annex VI,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Annex VI, the text of which is set out at annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 February 2011, unless prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 August 2011 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to the 1973 Convention, as modified by the 1978 and 1997 Protocols, certified copies of the present resolution and the text of the amendments contained in the Annex; and

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to the 1973 Convention, as modified by the 1978 and 1997 Protocols, copies of the present resolution and its Annex.

ANNEX

AMENDMENTS TO REGULATIONS 13, 14 AND NEW APPENDIX VII OF THE REVISED MARPOL ANNEX VI

1 Paragraph 6 of regulation 13 is amended as follows:

"6 For the purposes of this regulation, emission control areas shall be:

.1 the North American area, which means the area described by the coordinates provided in appendix VII to this Annex; and

.2 any other sea area, including any port area, designated by the Organization in accordance with the criteria and procedures set forth in appendix III to this Annex."

2 Paragraph 3 of regulation 14 is replaced by the following:

"3 For the purpose of this regulation, emission control areas shall include:

.1 the Baltic Sea area as defined in regulation 1.11.2 of Annex I and the North Sea as defined in regulation 5(1)(f) of Annex V;

.2 the North American area as described by the coordinates provided in appendix VII to this Annex; and

.3 any other sea area, including any port area, designated by the Organization in accordance with the criteria and procedures set forth in appendix III to this Annex."

3 New appendix VII is added as follows:

"***Appendix VII***
North American Emission Control Area
(Regulation 13.6 and regulation 14.3)

The North American area comprises:

.1 the sea area located off the Pacific coasts of the United States and Canada, enclosed by geodesic lines connecting the following coordinates:

POINT	LATITUDE	LONGITUDE
1	32º 32′ 10″ N.	117º 06′ 11″ W.
2	32º 32′ 04″ N.	117º 07′ 29″ W.
3	32º 31′ 39″ N.	117º 14′ 20″ W.
4	32º 33′ 13″ N.	117º 15′ 50″ W.
5	32º 34′ 21″ N.	117º 22′ 01″ W.
6	32º 35′ 23″ N.	117º 27′ 53″ W.
7	32º 37′ 38″ N.	117º 49′ 34″ W.
8	31º 07′ 59″ N.	118º 36′ 21″ W.
9	30º 33′ 25″ N.	121º 47′ 29″ W.

POINT	LATITUDE	LONGITUDE
10	31º 46′ 11″ N.	123º 17′ 22″ W.
11	32º 21′ 58″ N.	123º 50′ 44″ W.
12	32º 56′ 39″ N.	124º 11′ 47″ W.
13	33º 40′ 12″ N.	124º 27′ 15″ W.
14	34º 31′ 28″ N.	125º 16′ 52″ W.
15	35º 14′ 38″ N.	125º 43′ 23″ W.
16	35º 43′ 60″ N.	126º 18′ 53″ W.
17	36º 16′ 25″ N.	126º 45′ 30″ W.
18	37º 01′ 35″ N.	127º 07′ 18″ W.
19	37º 45′ 39″ N.	127º 38′ 02″ W.
20	38º 25′ 08″ N.	127º 52′ 60″ W.
21	39º 25′ 05″ N.	128º 31′ 23″ W.
22	40º 18′ 47″ N.	128º 45′ 46″ W.
23	41º 13′ 39″ N.	128º 40′ 22″ W.
24	42º 12′ 49″ N.	129º 00′ 38″ W.
25	42º 47′ 34″ N.	129º 05′ 42″ W.
26	43º 26′ 22″ N.	129º 01′ 26″ W.
27	44º 24′ 43″ N.	128º 41′ 23″ W.
28	45º 30′ 43″ N.	128º 40′ 02″ W.
29	46º 11′ 01″ N.	128º 49′ 01″ W.
30	46º 33′ 55″ N.	129º 04′ 29″ W.
31	47º 39′ 55″ N.	131º 15′ 41″ W.
32	48º 32′ 32″ N.	132º 41′ 00″ W.
33	48º 57′ 47″ N.	133º 14′ 47″ W.
34	49º 22′ 39″ N.	134º 15′ 51″ W.
35	50º 01′ 52″ N.	135º 19′ 01″ W.
36	51º 03′ 18″ N.	136º 45′ 45″ W.
37	51º 54′ 04″ N.	137º 41′ 54″ W.
38	52º 45′ 12″ N.	138º 20′ 14″ W.
39	53º 29′ 20″ N.	138º 40′ 36″ W.
40	53º 40′ 39″ N.	138º 48′ 53″ W.
41	54º 13′ 45″ N.	139º 32′ 38″ W.
42	54º 39′ 25″ N.	139º 56′ 19″ W.
43	55º 20′ 18″ N.	140º 55′ 45″ W.
44	56º 07′ 12″ N.	141º 36′ 18″ W.
45	56º 28′ 32″ N.	142º 17′ 19″ W.
46	56º 37′ 19″ N.	142º 48′ 57″ W.
47	58º 51′ 04″ N.	153º 15′ 03″ W.

.2 the sea areas located off the Atlantic coasts of the United States, Canada, and France (Saint-Pierre-et-Miquelon) and the Gulf of Mexico coast of the United States enclosed by geodesic lines connecting the following coordinates:

POINT	LATITUDE	LONGITUDE
1	60º 00′ 00″ N.	64º 09′ 36″ W.
2	60º 00′ 00″ N.	56º 43′ 00″ W.
3	58º 54′ 01″ N.	55º 38′ 05″ W.
4	57º 50′ 52″ N.	55º 03′ 47″ W.
5	57º 35′ 13″ N.	54º 00′ 59″ W.
6	57º 14′ 20″ N.	53º 07′ 58″ W.
7	56º 48′ 09″ N.	52º 23′ 29″ W.
8	56º 18′ 13″ N.	51º 49′ 42″ W.

POINT	LATITUDE	LONGITUDE
9	54º 23′ 21″ N.	50º 17′ 44″ W.
10	53º 44′ 54″ N.	50º 07′ 17″ W.
11	53º 04′ 59″ N.	50º 10′ 05″ W.
12	52º 20′ 06″ N.	49º 57′ 09″ W.
13	51º 34′ 20″ N.	48º 52′ 45″ W.
14	50º 40′ 15″ N.	48º 16′ 04″ W.
15	50º 02′ 28″ N.	48º 07′ 03″ W.
16	49º 24′ 03″ N.	48º 09′ 35″ W.
17	48º 39′ 22″ N.	47º 55′ 17″ W.
18	47º 24′ 25″ N.	47º 46′ 56″ W.
19	46º 35′ 12″ N.	48º 00′ 54″ W.
20	45º 19′ 45″ N.	48º 43′ 28″ W.
21	44º 43′ 38″ N.	49º 16′ 50″ W.
22	44º 16′ 38″ N.	49º 51′ 23″ W.
23	43º 53′ 15″ N.	50º 34′ 01″ W.
24	43º 36′ 06″ N.	51º 20′ 41″ W.
25	43º 23′ 59″ N.	52º 17′ 22″ W.
26	43º 19′ 50″ N.	53º 20′ 13″ W.
27	43º 21′ 14″ N.	54º 09′ 20″ W.
28	43º 29′ 41″ N.	55º 07′ 41″ W.
29	42º 40′ 12″ N.	55º 31′ 44″ W.
30	41º 58′ 19″ N.	56º 09′ 34″ W.
31	41º 20′ 21″ N.	57º 05′ 13″ W.
32	40º 55′ 34″ N.	58º 02′ 55″ W.
33	40º 41′ 38″ N.	59º 05′ 18″ W.
34	40º 38′ 33″ N.	60º 12′ 20″ W.
35	40º 45′ 46″ N.	61º 14′ 03″ W.
36	41º 04′ 52″ N.	62º 17′ 49″ W.
37	40º 36′ 55″ N.	63º 10′ 49″ W.
38	40º 17′ 32″ N.	64º 08′ 37″ W.
39	40º 07′ 46″ N.	64º 59′ 31″ W.
40	40º 05′ 44″ N.	65º 53′ 07″ W.
41	39º 58′ 05″ N.	65º 59′ 51″ W.
42	39º 28′ 24″ N.	66º 21′ 14″ W.
43	39º 01′ 54″ N.	66º 48′ 33″ W.
44	38º 39′ 16″ N.	67º 20′ 59″ W.
45	38º 19′ 20″ N.	68º 02′ 01″ W.
46	38º 05′ 29″ N.	68º 46′ 55″ W.
47	37º 58′ 14″ N.	69º 34′ 07″ W.
48	37º 57′ 47″ N.	70º 24′ 09″ W.
49	37º 52′ 46″ N.	70º 37′ 50″ W.
50	37º 18′ 37″ N.	71º 08′ 33″ W.
51	36º 32′ 25″ N.	71º 33′ 59″ W.
52	35º 34′ 58″ N.	71º 26′ 02″ W.
53	34º 33′ 10″ N.	71º 37′ 04″ W.
54	33º 54′ 49″ N.	71º 52′ 35″ W.
55	33º 19′ 23″ N.	72º 17′ 12″ W.
56	32º 45′ 31″ N.	72º 54′ 05″ W.
57	31º 55′ 13″ N.	74º 12′ 02″ W.
58	31º 27′ 14″ N.	75º 15′ 20″ W.
59	31º 03′ 16″ N.	75º 51′ 18″ W.
60	30º 45′ 42″ N.	76º 31′ 38″ W.
61	30º 12′ 48″ N.	77º 18′ 29″ W.

POINT	LATITUDE	LONGITUDE
62	29º 25′ 17″ N.	76º 56′ 42″ W.
63	28º 36′ 59″ N.	76º 47′ 60″ W.
64	28º 17′ 13″ N.	76º 40′ 10″ W.
65	28º 17′ 12″ N.	79º 11′ 23″ W.
66	27º 52′ 56″ N.	79º 28′ 35″ W.
67	27º 26′ 01″ N.	79º 31′ 38″ W.
68	27º 16′ 13″ N.	79º 34′ 18″ W.
69	27º 11′ 54″ N.	79º 34′ 56″ W.
70	27º 05′ 59″ N.	79º 35′ 19″ W.
71	27º 00′ 28″ N.	79º 35′ 17″ W.
72	26º 55′ 16″ N.	79º 34′ 39″ W.
73	26º 53′ 58″ N.	79º 34′ 27″ W.
74	26º 45′ 46″ N.	79º 32′ 41″ W.
75	26º 44′ 30″ N.	79º 32′ 23″ W.
76	26º 43′ 40″ N.	79º 32′ 20″ W.
77	26º 41′ 12″ N.	79º 32′ 01″ W.
78	26º 38′ 13″ N.	79º 31′ 32″ W.
79	26º 36′ 30″ N.	79º 31′ 06″ W.
80	26º 35′ 21″ N.	79º 30′ 50″ W.
81	26º 34′ 51″ N.	79º 30′ 46″ W.
82	26º 34′ 11″ N.	79º 30′ 38″ W.
83	26º 31′ 12″ N.	79º 30′ 15″ W.
84	26º 29′ 05″ N.	79º 29′ 53″ W.
85	26º 25′ 31″ N.	79º 29′ 58″ W.
86	26º 23′ 29″ N.	79º 29′ 55″ W.
87	26º 23′ 21″ N.	79º 29′ 54″ W.
88	26º 18′ 57″ N.	79º 31′ 55″ W.
89	26º 15′ 26″ N.	79º 33′ 17″ W.
90	26º 15′ 13″ N.	79º 33′ 23″ W.
91	26º 08′ 09″ N.	79º 35′ 53″ W.
92	26º 07′ 47″ N.	79º 36′ 09″ W.
93	26º 06′ 59″ N.	79º 36′ 35″ W.
94	26º 02′ 52″ N.	79º 38′ 22″ W.
95	25º 59′ 30″ N.	79º 40′ 03″ W.
96	25º 59′ 16″ N.	79º 40′ 08″ W.
97	25º 57′ 48″ N.	79º 40′ 38″ W.
98	25º 56′ 18″ N.	79º 41′ 06″ W.
99	25º 54′ 04″ N.	79º 41′ 38″ W.
100	25º 53′ 24″ N.	79º 41′ 46″ W.
101	25º 51′ 54″ N.	79º 41′ 59″ W.
102	25º 49′ 33″ N.	79º 42′ 16″ W.
103	25º 48′ 24″ N.	79º 42′ 23″ W.
104	25º 48′ 20″ N.	79º 42′ 24″ W.
105	25º 46′ 26″ N.	79º 42′ 44″ W.
106	25º 46′ 16″ N.	79º 42′ 45″ W.
107	25º 43′ 40″ N.	79º 42′ 59″ W.
108	25º 42′ 31″ N.	79º 42′ 48″ W.
109	25º 40′ 37″ N.	79º 42′ 27″ W.
110	25º 37′ 24″ N.	79º 42′ 27″ W.
111	25º 37′ 08″ N.	79º 42′ 27″ W.
112	25º 31′ 03″ N.	79º 42′ 12″ W.
113	25º 27′ 59″ N.	79º 42′ 11″ W.
114	25º 24′ 04″ N.	79º 42′ 12″ W.

POINT	LATITUDE	LONGITUDE
115	25º 22′ 21″ N.	79º 42′ 20″ W.
116	25º 21′ 29″ N.	79º 42′ 08″ W.
117	25º 16′ 52″ N.	79º 41′ 24″ W.
118	25º 15′ 57″ N.	79º 41′ 31″ W.
119	25º 10′ 39″ N.	79º 41′ 31″ W.
120	25º 09′ 51″ N.	79º 41′ 36″ W.
121	25º 09′ 03″ N.	79º 41′ 45″ W.
122	25º 03′ 55″ N.	79º 42′ 29″ W.
123	25º 02′ 60″ N.	79º 42′ 56″ W.
124	25º 00′ 30″ N.	79º 44′ 05″ W.
125	24º 59′ 03″ N.	79º 44′ 48″ W.
126	24º 55′ 28″ N.	79º 45′ 57″ W.
127	24º 44′ 18″ N.	79º 49′ 24″ W.
128	24º 43′ 04″ N.	79º 49′ 38″ W.
129	24º 42′ 36″ N.	79º 50′ 50″ W.
130	24º 41′ 47″ N.	79º 52′ 57″ W.
131	24º 38′ 32″ N.	79º 59′ 58″ W.
132	24º 36′ 27″ N.	80º 03′ 51″ W.
133	24º 33′ 18″ N.	80º 12′ 43″ W.
134	24º 33′ 05″ N.	80º 13′ 21″ W.
135	24º 32′ 13″ N.	80º 15′ 16″ W.
136	24º 31′ 27″ N.	80º 16′ 55″ W.
137	24º 30′ 57″ N.	80º 17′ 47″ W.
138	24º 30′ 14″ N.	80º 19′ 21″ W.
139	24º 30′ 06″ N.	80º 19′ 44″ W.
140	24º 29′ 38″ N.	80º 21′ 05″ W.
141	24º 28′ 18″ N.	80º 24′ 35″ W.
142	24º 28′ 06″ N.	80º 25′ 10″ W.
143	24º 27′ 23″ N.	80º 27′ 20″ W.
144	24º 26′ 30″ N.	80º 29′ 30″ W.
145	24º 25′ 07″ N.	80º 32′ 22″ W.
146	24º 23′ 30″ N.	80º 36′ 09″ W.
147	24º 22′ 33″ N.	80º 38′ 56″ W.
148	24º 22′ 07″ N.	80º 39′ 51″ W.
149	24º 19′ 31″ N.	80º 45′ 21″ W.
150	24º 19′ 16″ N.	80º 45′ 47″ W.
151	24º 18′ 38″ N.	80º 46′ 49″ W.
152	24º 18′ 35″ N.	80º 46′ 54″ W.
153	24º 09′ 51″ N.	80º 59′ 47″ W.
154	24º 09′ 48″ N.	80º 59′ 51″ W.
155	24º 08′ 58″ N.	81º 01′ 07″ W.
156	24º 08′ 30″ N.	81º 01′ 51″ W.
157	24º 08′ 26″ N.	81º 01′ 57″ W.
158	24º 07′ 28″ N.	81º 03′ 06″ W.
159	24º 02′ 20″ N.	81º 09′ 05″ W.
160	23º 59′ 60″ N.	81º 11′ 16″ W.
161	23º 55′ 32″ N.	81º 12′ 55″ W.
162	23º 53′ 52″ N.	81º 19′ 43″ W.
163	23º 50′ 52″ N.	81º 29′ 59″ W.
164	23º 50′ 02″ N.	81º 39′ 59″ W.
165	23º 49′ 05″ N.	81º 49′ 59″ W.
166	23º 49′ 05″ N.	82º 00′ 11″ W.
167	23º 49′ 42″ N.	82º 09′ 59″ W.

POINT	LATITUDE	LONGITUDE
168	23º 51′ 14″ N.	82º 24′ 59″ W.
169	23º 51′ 14″ N.	82º 39′ 59″ W.
170	23º 49′ 42″ N.	82º 48′ 53″ W.
171	23º 49′ 32″ N.	82º 51′ 11″ W.
172	23º 49′ 24″ N.	82º 59′ 59″ W.
173	23º 49′ 52″ N.	83º 14′ 59″ W.
174	23º 51′ 22″ N.	83º 25′ 49″ W.
175	23º 52′ 27″ N.	83º 33′ 01″ W.
176	23º 54′ 04″ N.	83º 41′ 35″ W.
177	23º 55′ 47″ N.	83º 48′ 11″ W.
178	23º 58′ 38″ N.	83º 59′ 59″ W.
179	24º 09′ 37″ N.	84º 29′ 27″ W.
180	24º 13′ 20″ N.	84º 38′ 39″ W.
181	24º 16′ 41″ N.	84º 46′ 07″ W.
182	24º 23′ 30″ N.	84º 59′ 59″ W.
183	24º 26′ 37″ N.	85º 06′ 19″ W.
184	24º 38′ 57″ N.	85º 31′ 54″ W.
185	24º 44′ 17″ N.	85º 43′ 11″ W.
186	24º 53′ 57″ N.	85º 59′ 59″ W.
187	25º 10′ 44″ N.	86º 30′ 07″ W.
188	25º 43′ 15″ N.	86º 21′ 14″ W.
189	26º 13′ 13″ N.	86º 06′ 45″ W.
190	26º 27′ 22″ N.	86º 13′ 15″ W.
191	26º 33′ 46″ N.	86º 37′ 07″ W.
192	26º 01′ 24″ N.	87º 29′ 35″ W.
193	25º 42′ 25″ N.	88º 33′ 00″ W.
194	25º 46′ 54″ N.	90º 29′ 41″ W.
195	25º 44′ 39″ N.	90º 47′ 05″ W.
196	25º 51′ 43″ N.	91º 52′ 50″ W.
197	26º 17′ 44″ N.	93º 03′ 59″ W.
198	25º 59′ 55″ N.	93º 33′ 52″ W.
199	26º 00′ 32″ N.	95º 39′ 27″ W.
200	26º 00′ 33″ N.	96º 48′ 30″ W.
201	25º 58′ 32″ N.	96º 55′ 28″ W.
202	25º 58′ 15″ N.	96º 58′ 41″ W.
203	25º 57′ 58″ N.	97º 01′ 54″ W.
204	25º 57′ 41″ N.	97º 05′ 08″ W.
205	25º 57′ 24″ N.	97º 08′ 21″ W.
206	25º 57′ 24″ N.	97º 08′ 47″ W.

.3 the sea area located off the coasts of the Hawaiian Islands of Hawai´i, Maui, Oahu, Moloka´i, Ni´ihau, Kaua´i, Lāna´i, and Kaho´olawe, enclosed by geodesic lines connecting the following coordinates:

POINT	LATITUDE	LONGITUDE
1	22º 32′ 54″ N.	153º 00′ 33″ W.
2	23º 06′ 05″ N.	153º 28′ 36″ W.
3	23º 32′ 11″ N.	154º 02′ 12″ W.
4	23º 51′ 47″ N.	154º 36′ 48″ W.
5	24º 21′ 49″ N.	155º 51′ 13″ W.
6	24º 41′ 47″ N.	156º 27′ 27″ W.
7	24º 57′ 33″ N.	157º 22′ 17″ W.

POINT	LATITUDE	LONGITUDE
8	25º 13′ 41″ N.	157º 54′ 13″ W.
9	25º 25′ 31″ N.	158º 30′ 36″ W.
10	25º 31′ 19″ N.	159º 09′ 47″ W.
11	25º 30′ 31″ N.	159º 54′ 21″ W.
12	25º 21′ 53″ N.	160º 39′ 53″ W.
13	25º 00′ 06″ N.	161º 38′ 33″ W.
14	24º 40′ 49″ N.	162º 13′ 13″ W.
15	24º 15′ 53″ N.	162º 43′ 08″ W.
16	23º 40′ 50″ N.	163º 13′ 00″ W.
17	23º 03′ 20″ N.	163º 32′ 58″ W.
18	22º 20′ 09″ N.	163º 44′ 41″ W.
19	21º 36′ 45″ N.	163º 46′ 03″ W.
20	20º 55′ 26″ N.	163º 37′ 44″ W.
21	20º 13′ 34″ N.	163º 19′ 13″ W.
22	19º 39′ 03″ N.	162º 53′ 48″ W.
23	19º 09′ 43″ N.	162º 20′ 35″ W.
24	18º 39′ 16″ N.	161º 19′ 14″ W.
25	18º 30′ 31″ N.	160º 38′ 30″ W.
26	18º 29′ 31″ N.	159º 56′ 17″ W.
27	18º 10′ 41″ N.	159º 14′ 08″ W.
28	17º 31′ 17″ N.	158º 56′ 55″ W.
29	16º 54′ 06″ N.	158º 30′ 29″ W.
30	16º 25′ 49″ N.	157º 59′ 25″ W.
31	15º 59′ 57″ N.	157º 17′ 35″ W.
32	15º 40′ 37″ N.	156º 21′ 06″ W.
33	15º 37′ 36″ N.	155º 22′ 16″ W.
34	15º 43′ 46″ N.	154º 46′ 37″ W.
35	15º 55′ 32″ N.	154º 13′ 05″ W.
36	16º 46′ 27″ N.	152º 49′ 11″ W.
37	17º 33′ 42″ N.	152º 00′ 32″ W.
38	18º 30′ 16″ N.	151º 30′ 24″ W.
39	19º 02′ 47″ N.	151º 22′ 17″ W.
40	19º 34′ 46″ N.	151º 19′ 47″ W.
41	20º 07′ 42″ N.	151º 22′ 58″ W.
42	20º 38′ 43″ N.	151º 31′ 36″ W.
43	21º 29′ 09″ N.	151º 59′ 50″ W.
44	22º 06′ 58″ N.	152º 31′ 25″ W.
45	22º 32′ 54″ N.	153º 00′ 33″ W.

(end of text)"

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ANNEX 20

RESOLUTION MEPC.216(63)
Adopted on 2 March 2012

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Regional arrangements for port reception facilities under MARPOL Annexes I, II, IV and V)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED draft amendments to Annexes I, II, IV and V of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Annexes I, II, IV and V of MARPOL 73/78, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 February 2013 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 August 2013 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the annex;

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its annex.

ANNEX

AMENDMENTS TO MARPOL ANNEXES I, II, IV AND V

1 ***New paragraphs 3bis and 4bis are added to regulation 38 of Annex I:***

3*bis* Small Island Developing States may satisfy the requirements in paragraphs 1 to 3 of this regulation through regional arrangements when, because of those States' unique circumstances, such arrangements are the only practical means to satisfy these requirements. Parties participating in a regional arrangement shall develop a Regional Reception Facilities Plan, taking into account the guidelines developed by the Organization.

The Government of each Party participating in the arrangement shall consult with the Organization, for circulation to the Parties of the present Convention:

.1 how the Regional Reception Facilities Plan takes into account the Guidelines;

.2 particulars of the identified Regional Ships Waste Reception Centres; and

.3 particulars of those ports with only limited facilities.

4*bis* Small Island Developing States may satisfy the requirements in paragraph 4 of this regulation through regional arrangements when, because of those States' unique circumstances, such arrangements are the only practical means to satisfy these requirements. Parties participating in a regional arrangement shall develop a Regional Reception Facilities Plan, taking into account the guidelines developed by the Organization.

The Government of each Party participating in the arrangement shall consult with the Organization for circulation to the Parties of the present Convention:

.1 how the Regional Reception Facilities Plan takes into account the Guidelines;

.2 particulars of the identified Regional Ships Waste Reception Centres; and

.3 particulars of those ports with only limited facilities.

2 ***New paragraphs 2bis and 2ter are added to regulation 18 of Annex II:***

2*bis* Small Island Developing States may satisfy the requirements in paragraphs 1, 2 and 4 of this regulation through regional arrangements when, because of those States' unique circumstances, such arrangements are the only practical means to satisfy these requirements. Parties participating in a regional arrangement shall develop a Regional Reception Facilities Plan, taking into account the guidelines developed by the Organization.

The Government of each Party participating in the arrangement shall consult with the Organization for circulation to the Parties of the present Convention:

.1 how the Regional Reception Facilities Plan takes into account the Guidelines;

.2 particulars of the identified Regional Ships Waste Reception Centres; and

.3 particulars of those ports with only limited facilities.

2*ter* Where regulation 13 of this annex requires a prewash and the Regional Reception Facility Plan is applicable to the port of unloading, the prewash and subsequent discharge to a reception facility shall be carried out as prescribed in regulation 13 of this annex or at a Regional Ship Waste Reception Centre specified in the applicable Regional Reception Facility Plan.

3 ***New paragraph 1bis is added to regulation 12 of Annex IV:***

1*bis* Small Island Developing States may satisfy the requirements in paragraph 1 of this regulation through regional arrangements when, because of those States' unique circumstances, such arrangements are the only practical means to satisfy these requirements. Parties participating in a regional arrangement shall develop a Regional Reception Facilities Plan, taking into account the guidelines developed by the Organization.

The Government of each Party participating in the arrangement shall consult with the Organization for circulation to the Parties of the present Convention:

.1 how the Regional Reception Facilities Plan takes into account the Guidelines;

.2 particulars of the identified Regional Ships Waste Reception Centres; and

.3 particulars of those ports with only limited facilities.

4 ***New paragraph 2bis is added to regulation 8 of Annex V[1]:***

2*bis* Small Island Developing States may satisfy the requirements in paragraphs 1 and 2.1 of this regulation through regional arrangements when, because of those States' unique circumstances, such arrangements are the only practical means to satisfy these requirements. Parties participating in a regional arrangement shall develop a Regional Reception Facilities Plan, taking into account the guidelines developed by the Organization.

The Government of each Party participating in the Arrangement shall consult with the Organization for circulation to the Parties of the present Convention:

.1 how the Regional Reception Facilities Plan takes into account the Guidelines;

.2 particulars of the identified Regional Ships Waste Reception Centres; and

.3 particulars of those ports with only limited facilities.

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[1] Text of revised Annex V, adopted by resolution MEPC.201(62).

ANNEX 21

RESOLUTION MEPC.235(65)

Adopted on 17 May 2013

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Amendments to Form A and Form B of Supplements to the IOPP Certificate under MARPOL Annex I)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

HAVING CONSIDERED draft amendments to Form A and Form B of Supplements to the IOPP Certificate under Annex I of MARPOL,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Form A and Form B of Supplements to the IOPP Certificate under Annex I of MARPOL, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 April 2014 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 October 2014 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL certified copies of the present resolution and the text of the amendments contained in the annex;

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL copies of the present resolution and its Annex.

* * *

ANNEX

AMENDMENTS TO FORM A AND FORM B OF SUPPLEMENTS TO THE IOPP CERTIFICATE UNDER MARPOL ANNEX I

1 Amendments to the Supplement to the IOPP Certificate (Form A)

The existing paragraph 3.2.1 is replaced by the following:

"3.2.1 Incinerator for oil residues (sludge)…… "

2 Amendments to the Supplement to the IOPP Certificate (Form B)

The existing paragraph 3.2.1 is replaced by the following:

"3.2.1 Incinerator for oil residues (sludge)…… "

***

ANNEX 24

RESOLUTION MEPC.238(65)

Adopted on 17 May 2013

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Amendments to MARPOL Annexes I and II to make the RO Code mandatory)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

HAVING CONSIDERED the draft amendments to Annexes I and II of MARPOL to make the RO Code mandatory,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Annexes I and II of MARPOL, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2014 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2015 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL certified copies of the present resolution and the text of the amendments contained in the annex;

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL copies of the present resolution and its annex.

* * *

ANNEX

AMENDMENTS TO MARPOL ANNEXES I AND II

Amendments to MARPOL Annex I

Regulation 6

The existing text of the last sentence of paragraph 3.1 is replaced by the following:

"Such organizations, including classification societies, shall be authorized by the Administration in accordance with the provisions of the present Convention and with the Code for Recognized Organizations (RO Code), consisting of part 1 and part 2 (the provisions of which shall be treated as mandatory) and part 3 (the provisions of which shall be treated as recommendatory), as adopted by the Organization by resolution [MEPC…], as may be amended by the Organization, provided that:

.1 amendments to part 1 and part 2 of the RO Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to this annex;

.2 amendments to part 3 of the RO Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure; and

.3 any amendments referred to in .1 and .2 adopted by the Maritime Safety Committee and the Marine Environment Protection Committee are identical and come into force or take effect at the same time, as appropriate."

Amendments to MARPOL Annex II

Regulation 8

The existing text of paragraph 2.2 is replaced by the following:

"Such organizations, including classification societies, shall be authorized by the Administration in accordance with the provisions of the present Convention and with the Code for Recognized Organizations (RO Code), consisting of part 1 and part 2 (the provisions of which shall be treated as mandatory) and part 3 (the provisions of which shall be treated as recommendatory), as adopted by the Organization by resolution [MEPC…], as may be amended by the Organization, provided that:

.1 amendments to part 1 and part 2 of the RO Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to this annex;

.2 amendments to part 3 of the RO Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure; and

.3 any amendments referred to in .1 and .2 adopted by the Maritime Safety Committee and the Marine Environment Protection Committee are identical and come into force or take effect at the same time, as appropriate."

***

ANNEX 7

RESOLUTION MEPC.246(66)
Adopted on 4 April 2014

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Amendments to MARPOL Annexes I, II, III, IV and V to make the use of the III Code mandatory)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

RECALLING that the Assembly, at its twenty-eighth regular session, adopted, by resolution A.1070(28), the *IMO Instruments Implementation Code (III Code*),

HAVING CONSIDERED proposed amendments to MARPOL Annexes I, II, III, IV and V to make the use of the III Code mandatory,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to Annexes I, II, III, IV and V of MARPOL, the text of which is set out in the annex to the present resolution;

2. DETERMINES that, pursuant to regulation 44 of Annex I, regulation 19 of Annex II, regulation 10 of Annex III, regulation 15 of Annex IV and regulation 11 of Annex V, whenever the word "should" is used in the III Code (annex to resolution A.1070(28)), it is to be read as being "shall", except for paragraphs 29, 30, 31 and 32;

3. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2015 unless, prior to that date, not less than one third of the Parties or Parties, the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

4. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2016 upon their acceptance in accordance with paragraph 2 above;

5. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL, certified copies of the present resolution and the text of the amendments contained in the annex;

6. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL, copies of the present resolution and its annex.

ANNEX

AMENDMENTS TO MARPOL ANNEXES I, II, III, IV AND V

Amendments to MARPOL Annex I

1 The following is added at the end of regulation 1:

"44 *Audit* means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

45 *Audit Scheme* means the IMO Member State Audit Scheme established by the Organization and taking into account the guidelines developed by the Organization*.

46 *Code for Implementation* means the IMO Instruments Implementation Code (III Code) adopted by the Organization by resolution A.1070(28).

47 *Audit Standard* means the Code for Implementation.

* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

2 A new chapter 10 is added to read as follows:

"**Chapter 10 – Verification of compliance with the provisions of this Convention**

Regulation 44
Application

Parties shall use the provisions of the Code for Implementation in the execution of their obligations and responsibilities contained in this Annex.

Regulation 45
Verification of compliance

1 Every Party shall be subject to periodic audits by the Organization in accordance with the audit standard to verify compliance with and implementation of this Annex.

2 The Secretary-General of the Organization shall have responsibility for administering the Audit Scheme, based on the guidelines developed by the Organization*.

3 Every Party shall have responsibility for facilitating the conduct of the audit and implementation of a programme of actions to address the findings, based on the guidelines developed by the Organization*.

4 Audit of all Parties shall be:

.1 based on an overall schedule developed by the Secretary-General of the Organization, taking into account the guidelines developed by the Organization*; and

.2 conducted at periodic intervals, taking into account the guidelines developed by the Organization*.

* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

Amendments to MARPOL Annex II

3 The following is added at the end of regulation 1:

"18 *Audit* means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

19 *Audit Scheme* means the IMO Member State Audit Scheme established by the Organization and taking into account the guidelines developed by the Organization*.

20 *Code for Implementation* means the IMO Instruments Implementation Code (III Code) adopted by the Organization by resolution A.1070(28).

21 *Audit Standard* means the Code for Implementation.

* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

4 A new chapter 9 is added to read as follows:

"**Chapter 9 – Verification of compliance with the provisions of this Convention**

Regulation 19
Application

Parties shall use the provisions of the Code for Implementation in the execution of their obligations and responsibilities contained in this Annex.

Regulation 20
Verification of compliance

1 Every Party shall be subject to periodic audits by the Organization in accordance with the audit standard to verify compliance with and implementation of this Annex.

2 The Secretary-General of the Organization shall have responsibility for administering the Audit Scheme, based on the guidelines developed by the Organization*.

3 Every Party shall have responsibility for facilitating the conduct of the audit and implementation of a programme of actions to address the findings, based on the guidelines adopted by the Organization*.

4 Audit of all Parties shall be:

.1 based on an overall schedule developed by the Secretary-General of the Organization, taking into account the guidelines developed by the Organization*; and

.2 conducted at periodic intervals, taking into account the guidelines developed by the Organization*.

_____

* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

Amendments to MARPOL Annex III

5 A new heading is added before regulation 1 to read as follows:

"*Chapter 1 – General*"

6 A new regulation 1 is added to read as follows:

"**Regulation 1**
Definitions

For the purposes of this annex:

1 *Harmful substances* are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code) or which meet the criteria in the appendix of this annex.

2 *Packaged form* is defined as the forms of containment specified for harmful substances in the IMDG Code.

3 *Audit* means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

4 *Audit Scheme* means the IMO Member State Audit Scheme established by the Organization and taking into account the guidelines developed by the Organization*.

5 *Code for Implementation means* the IMO Instruments Implementation Code (III Code) adopted by the Organization by resolution A.1070(28).

6 *Audit Standard* means the Code for Implementation.

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* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

7 The subsequent regulations are renumbered accordingly.

8 In regulation 2, Application, subparagraphs 1.1 and 1.2 are deleted.

9 A new chapter 2 is added to read as follows:

"**Chapter 2 – Verification of compliance with the provisions of this annex**

Regulation 10
Application

Parties shall use the provisions of the Code for Implementation in the execution of their obligations and responsibilities contained in this Annex.

Regulation 11
Verification of compliance

1 Every Party shall be subject to periodic audits by the Organization in accordance with the audit standard to verify compliance with and implementation of this Annex.

2 The Secretary-General of the Organization shall have responsibility for administering the Audit Scheme, based on the guidelines developed by the Organization*.

3 Every Party shall have responsibility for facilitating the conduct of the audit and implementation of a programme of actions to address the findings, based on the guidelines developed by the Organization*.

4 Audit of all Parties shall be:

.1 based on an overall schedule developed by the Secretary General of the Organization, taking into account the guidelines developed by the Organization*; and

.2 conducted at periodic intervals, taking into account the guidelines developed by the Organization*.

---

* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

Amendments to MARPOL Annex IV

10 The following is added at the end of regulation 1:

"12 *Audit* means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

13 *Audit Scheme* means the IMO Member State Audit Scheme established by the Organization and taking into account the guidelines developed by the Organization*.

14 *Code for Implementation* means the IMO Instruments Implementation Code (III Code) adopted by the Organization by resolution A.1070(28).

15 *Audit Standard* means the Code for Implementation.

_____

* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

11 A new chapter 6 is added to read as follows:

"**Chapter 6 – Verification of compliance with the provisions of this annex**

Regulation 15
Application

Parties shall use the provisions of the Code for Implementation in the execution of their obligations and responsibilities contained in this Annex.

Regulation 16
Verification of compliance

1 Every Party shall be subject to periodic audits by the Organization in accordance with the audit standard to verify compliance with and implementation of this annex.

2 The Secretary-General of the Organization shall have responsibility for administering the Audit Scheme, based on the guidelines developed by the Organization*.

3 Every Party shall have responsibility for facilitating the conduct of the audit and implementation of a programme of actions to address the findings, based on the guidelines developed by the Organization*.

4 Audit of all Parties shall be:

.1 based on an overall schedule developed by the Secretary-General of the Organization, taking into account the guidelines developed by the Organization*; and

.2 conducted at periodic intervals, taking into account the guidelines developed by the Organization*.

---

* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

Amendments to MARPOL Annex V

12 A new heading is added before regulation 1 to read as follows:

"*Chapter 1 – General*"

13 The following is added at the end of regulation 1:

"15 *Audit* means a systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled.

16 *Audit Scheme* means the IMO Member State Audit Scheme established by the Organization and taking into account the guidelines developed by the Organization*.

17 *Code for Implementation means* the IMO Instruments Implementation Code (III Code) adopted by the Organization by resolution A.1070(28).

18 *Audit Standard* means the Code for Implementation.

---

* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067.(28)."

14 A new chapter 2 is added, to read as follows:

"**Chapter 2 – Verification of compliance with the provisions of this annex**

Regulation 11
Application

Parties shall use the provisions of the Code for Implementation in the execution of their obligations and responsibilities contained in this Annex.

Regulation 12
Verification of compliance

1 Every Party shall be subject to periodic audits by the Organization in accordance with the audit standard to verify compliance with and implementation of this Annex.

2 The Secretary-General of the Organization shall have responsibility for administering the Audit Scheme, based on the guidelines developed by the Organization*.

3 Every Party shall have responsibility for facilitating the conduct of the audit and implementation of a programme of actions to address the findings, based on the guidelines developed by the Organization*.

4 Audit of all Parties shall be:

.1 based on an overall schedule developed by the Secretary-General of the Organization, taking into account the guidelines developed by the Organization*; and

.2 conducted at periodic intervals, taking into account the guidelines developed by the Organization*.

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* Refer to the *Framework and Procedures for the IMO Member State Audit Scheme*, adopted by the Organization by resolution A.1067(28)."

***

ANNEX 9

RESOLUTION MEPC.248(66)
Adopted on 4 April 2014

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

Amendments to MARPOL Annex I
(Mandatory carriage requirements for a stability instrument)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

HAVING CONSIDERED proposed amendments to Annex I of MARPOL, developed by the Sub-Committee on Stability and Load Lines and on Fishing Vessels Safety, at its fifty-fifth session,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to Annex I of MARPOL, the text of which is set out in the annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2015 unless, prior to that date, not less than one third of the Parties or Parties, the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2016 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL, certified copies of the present resolution and the text of the amendments contained in the annex;

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL, copies of the present resolution and its annex.

ANNEX

AMENDMENTS TO MARPOL ANNEX I

Chapter 1 – General

Regulation 3 – Exemptions and waivers

1 A new paragraph 6 is inserted, as follows:

"6 The Administration may waive the requirements of regulation 28(6) for the following oil tankers if loaded in accordance with the conditions approved by the Administration taking into account the guidelines developed by the Organization*:

.1 oil tankers which are on a dedicated service, with a limited number of permutations of loading such that all anticipated conditions have been approved in the stability information provided to the master in accordance with regulation 28(5);

.2 oil tankers where stability verification is made remotely by a means approved by the Administration;

.3 oil tankers which are loaded within an approved range of loading conditions; or

.4 oil tankers constructed before 1 January 2016 provided with approved limiting KG/GM curves covering all applicable intact and damage stability requirements.

* Refer to operational guidance provided in part 2 of the *Guidelines for verification of damage stability requirements for tankers* (MSC.1/Circ.1461)."

Chapter 4 – Requirements for the cargo area of oil tankers

Regulation 28 – Subdivision and damage stability

2 The existing paragraph 6 is renumbered as paragraph 7.

3 A new paragraph 6 is inserted, as follows:

"6 All oil tankers shall be fitted with a stability instrument, capable of verifying compliance with intact and damage stability requirements approved by the Administration having regard to the performance standards recommended by the Organization*:

.1 oil tankers constructed before 1 January 2016 shall comply with this regulation at the first scheduled renewal survey of the ship after 1 January 2016 but not later than 1 January 2021;

.2 notwithstanding the requirements of subparagraph .1 a stability instrument fitted on an oil tanker constructed before 1 January 2016 need not be replaced provided it is capable of verifying compliance with intact and damage stability, to the satisfaction of the Administration; and

.3 for the purposes of control under regulation 11, the Administration shall issue a document of approval for the stability instrument.

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* Refer to part B, chapter 4, of the International Code on Intact Stability, 2008 (2008 IS Code), as amended; the *Guidelines for the Approval of Stability Instruments* (MSC.1/Circ.1229), annex, section 4, as amended; and the technical standards defined in part 1 of the *Guidelines for verification of damage stability requirements for tankers* (MSC.1/Circ.1461)."

Appendix II – Form of IOPP Certificate and Supplements, Form B

4 The following new paragraphs 5.7.5 and 5.7.6 are inserted:

"5.7.5 The ship is provided with an Approved Stability Instrument in accordance with regulation 28(6)..... ☐

5.7.6 The requirements of regulation 28(6) are waived in respect of the ship in accordance with regulation 3.6. Stability is verified by the following means:

.1 loading only to approved conditions defined in the stability information provided to the master in accordance with regulation 28(5)..... ☐

.2 verification is made remotely by a means approved by the Administration:..... ☐

.3 loading within an approved range of loading conditions defined in the stability information provided to the master in accordance with regulation 28(5)..... ☐

.4 loading in accordance with approved limiting KG/GM curves covering all applicable intact and damage stability requirements defined in the stability information provided to the master in accordance with regulation 28(5) ..... ☐"

***

REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE ON ITS SIXTY-SIXTH SESSION

Corrigendum

Annex 7, annex

1 In paragraph 1, the paragraph numbers "44", "45", "46"and "47" are replaced with the numbers "35", "36", "37" and "38", respectively.

Annex 9

2 The subtitle of resolution MEPC.248(66) is replaced with the following:

"(Amendments to MARPOL Annex I on mandatory carriage requirements for a stability instrument)"

Annex 9, annex

Chapter 4 – Requirements for the cargo area of oil tankers

3 New paragraphs 2 and 3 are inserted after existing paragraph 1, as follows:

"**Regulation 19 – Double hull and double bottom requirements for oil tanker delivered on or after 6 July 1996**

2 In paragraph 19.2.2, the term "regulation 28.6" is replaced with the term "regulation 28.7".

Regulation 20 – Double hull and double bottom requirements for oil tanker delivered before 6 July 1996

3 In paragraphs 20.1.2 and 20.4, the term "paragraph 28.6" is replaced with the term "paragraph 28.7"."

4 The existing paragraphs 2, 3 and 4 are renumbered as paragraphs 4, 5 and 6, respectively.

5 In the renumbered paragraph 5, the words "on or" are inserted between the words "renewal survey of the ship" and "after 1 January 2016" in the referenced subparagraph 6.1.

6 In the renumbered paragraph 6, the second sentence of the chapeau of the referenced paragraph 5.7.6 is replaced with the following:

"Stability is verified by one or more of the following means:"

7 A new paragraph 7 is added after renumbered paragraph 6, as follows:

"7 In paragraph 5.8.4, the term "paragraph 28.6" is replaced with the term "paragraph 28.7"."

Annex 10, annex

8 In paragraph 1, in the referenced subparagraph 2.2.1.2, the words "on or" are inserted between the words "renewal survey of the ship" and "after 1 January 2016".

9 In paragraph 2, in the referenced subparagraph 6.2, the words "one or more of" are inserted between the words "in accordance with" and "the following approved methods".

Annex 11, annex

10 In paragraph 3, in the referenced subparagraph 2.2.6.1, the words "on or" are inserted between the words "renewal survey of the ship" and "after 1 January 2016".

11 The following sentence is added at the end of paragraph 7:

"In the renumbered paragraphs 8.6.2 and 8.6.3, the referenced paragraph numbers "8.5.1", "8.5.1.2" and "8.5.1.3" are replaced with "8.6.1", "8.6.1.2" and "8.6.1.3", respectively."

12 A new paragraph 10 is added after existing paragraph 9, under the heading "Chapter 15 – Special requirements", as follows:

"10 The following footnote is added at the end of paragraph 15.13.3.2:

"

* Refer to the MSC–MEPC circular on Products requiring oxygen dependent inhibitors."

13 The existing paragraphs 10 to 12 are renumbered as paragraphs 11 to 13, respectively.

14 In the renumbered paragraph 13, in the referenced subparagraph 6.2, the words "one or more of" are inserted between the words "in accordance with" and "the following approved methods".

Annex 12

15 The subtitle "Amendments to MARPOL Annex VI and the NO_X Technical Code 2008" is deleted.

Annex 12, annex

16 Paragraphs 9, 10 and 11 are replaced by the following:

Regulation 20 – Attained Energy Efficiency Design Index (attained EEDI)

"9 Paragraph 1 is replaced with the following:

"1 The attained EEDI shall be calculated for:

.1 each new ship;

.2 each new ship which has undergone a major conversion; and

.3 each new or existing ship which has undergone a major conversion, that is so extensive that the ship is regarded by the Administration as a newly constructed ship,

which falls into one or more of the categories in regulations 2.25 to 2.35, 2.38 and 2.39 of this Annex. The attained EEDI shall be specific to each ship and shall indicate the estimated performance of the ship in terms of energy efficiency, and be accompanied by the EEDI technical file that contains the information necessary for the calculation of the attained EEDI and that shows the process of calculation. The attained EEDI shall be verified, based on the EEDI technical file, either by the Administration or by any organization duly authorized by it*.

---

* Refer to the *Code for Recognized Organizations (RO Code)*, adopted by the MEPC by resolution MEPC.237(65), as may be amended."

Regulation 21 – Required EEDI

"10 Paragraph 1 is replaced with the following:

"1 For each:

.1 new ship;

.2 new ship which has undergone a major conversion; and

.3 new or existing ship which has undergone a major conversion that is so extensive that the ship is regarded by the Administration as a newly constructed ship,

which falls into one of the categories in regulations 2.25 to 2.31, 2.33 to 2.35, 2.38 and 2.39 and to which this chapter is applicable, the attained EEDI shall be as follows:

Attained EEDI ≤ Required EEDI = (1-X/100) x reference line value

where X is the reduction factor specified in table 1 for the required EEDI compared to the EEDI reference line.

11 New rows are added to table 1 in paragraph 2 for ro-ro cargo ships (vehicle carrier), LNG carrier, cruise passenger ship having non-conventional propulsion, ro-ro cargo ships and ro-ro passenger ships, and marks ** and *** and their explanations are added, as follows:

Ship Type	Size	Phase 0 1 Jan 2013 – 31 Dec 2014	Phase 1 1 Jan 2015 – 31 Dec 2019	Phase 2 1 Jan 2020 – 31 Dec 2024	Phase 3 1 Jan 2025 and onwards
LNG carrier***	10,000 DWT and above	n/a	10**	20	30
Ro-ro cargo ship (vehicle carrier)***	10,000 DWT and above	n/a	5**	15	30
Ro-ro cargo ship***	2,000 DWT and above	n/a	5**	20	30
	1,000 – 2,000 DWT	n/a	0-5*,**	0-20*	0-30*
Ro-ro passenger ship***	1000 DWT and above	n/a	5**	20	30
	250 – 1,000 DWT	n/a	0-5*,**	0-20*	0-30*
Cruise passenger ship*** having non-conventional propulsion	85,000 GT and above	n/a	5**	20	30
	25,000 – 85,000 GT	n/a	0-5*,**	0-20*	0-30*

* Reduction factor to be linearly interpolated between the two values dependent upon ship size. The lower value of the reduction factor is to be applied to the smaller ship size.

** Phase 1 commences for those ships on 1 September 2015.

*** Reduction factor applies to those ships delivered on or after 1 September 2019, as defined in paragraph 43 of regulation 2.

Note: n/a means that no required EEDI applies."

Annex 18

17 For outputs 7.1.2.6, 7.1.2.10, 7.1.2.11 and 7.3.2.2, the target completion year "2014" is replaced with "2015".

ANNEX 7

RESOLUTION MEPC.256(67)

Adopted on 17 October 2014

AMENDMENT TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

Amendment to MARPOL Annex I

(Amendment to regulation 43)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 ("1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 ("1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

HAVING CONSIDERED proposed amendments to Annex I of MARPOL, concerning the carriage of heavy grade oil as ballast on ships operating in the Antarctic area,

1 ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to Annex I of MARPOL, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 September 2015 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 March 2016 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL, certified copies of the present resolution and the text of the amendments contained in the annex;

5 REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL copies of the present resolution and its annex.

ANNEX

AMENDMENT TO MARPOL ANNEX I

(Amendment to regulation 43)

Annex I
Regulations for the prevention of pollution by oil

Chapter 9
Special requirements for the use or carriage of oils in the Antarctic area

Regulation 43
Special requirements for the use or carriage of oils in the Antarctic area

In the chapeau of paragraph 1, between the words "the carriage in bulk as cargo" and "or carriage", insert:

", use as ballast,"

***

ANNEX 11

RESOLUTION MEPC.265(68)
(adopted on15 May 2015)

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

Amendments to MARPOL Annexes I, II, IV and V
(Making the use of the environment-related provisions of the Polar Code mandatory)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), which specifies the amendment procedure and confers upon the appropriate body of the Organization the function of considering and adopting amendments thereto,

RECOGNIZING the need to provide a mandatory framework for ships operating in polar waters due to the additional demands on ships, their systems and operation, which go beyond the existing requirements of MARPOL, and other relevant binding IMO instruments,

NOTING resolution MEPC.264(68), by which it adopted the International Code for Ships Operating in Polar Waters (Polar Code) with respect to its environment-related provisions,

NOTING ALSO that the Maritime Safety Committee, at its ninety-fourth session, adopted, by resolution MSC.385(94), the International Code for Ships Operating in Polar Waters with respect to its safety-related provisions, and, by resolution MSC.386(94), amendments to the 1974 SOLAS Convention to make the safety-related provisions of the Polar Code mandatory,

HAVING CONSIDERED proposed amendments to MARPOL Annexes I, II, IV and V to make the environment-related provisions of the Polar Code mandatory,

1 ADOPTS, in accordance with article 16(2)(d) of MARPOL, amendments to Annexes I, II, IV and V, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of MARPOL, that the amendments shall be deemed to have been accepted on 1 July 2016, unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of MARPOL, the said amendments shall enter into force on 1 January 2017 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, for the purposes of article 16(2)(e) of MARPOL, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Parties to MARPOL;

5 REQUESTS FURTHER the Secretary-General to transmit copies of the present resolution and its annex to Members of the Organization which are not Parties to MARPOL.

ANNEX

AMENDMENTS TO MARPOL ANNEXES I, II, IV AND V

ANNEX I
REGULATIONS FOR THE PREVENTION OF POLLUTION BY OIL

Chapter 1
General

Regulation 3 – Exemptions and waivers

1 In paragraph 1, the words "or section 1.2 of part II-A of the Polar Code" are inserted between "chapters 3 and 4 of this Annex" and "relating to construction".

2 A new paragraph 5.2.2 is added as follows:

".2 voyages within Arctic waters; or"

3 The existing paragraphs 5.2.2 to 5.2.6 are renumbered as paragraphs 5.2.3 to 5.2.7 and the subparagraphs are renumbered accordingly. In the renumbered paragraphs 5.2.5 and 5.2.6, the referenced paragraph numbers "5.2.2" and "5.2.2.2" are replaced by "5.2.3" and "5.2.3.2", respectively.

4 The chapeau of the renumbered paragraph 5.2.3 is replaced with the following:

".3 voyages within 50 nautical miles from the nearest land outside special areas or Arctic waters where the tanker is engaged in:"

Regulation 4 – Exceptions

5 The chapeau is replaced with the following:

"Regulations 15 and 34 of this Annex and paragraph 1.1.1 of part II-A of the Polar Code shall not apply to:"

Chapter 3
Requirements for machinery spaces of all ships

Part B
Equipment

Regulation 14 – Oil filtering equipment

6 Paragraph 5.1 is replaced with the following:

".1 any ship engaged exclusively on voyages within special areas or Arctic waters, or"

7 In paragraph 5.3.4, between the words "within special areas" and "or has been accepted", the words "or Arctic waters" are inserted.

Part C
Control of discharge of oil

Regulation 15 – Control of discharge of oil

8 At the end of the title for section A, the words "except in Arctic waters" are added.

9 At the end of the title for section C, the words "and Arctic waters" are added.

Chapter 4
Requirements for the cargo area of oil tankers

Part C
Control of operational discharges of oil

Regulation 34 – Control of discharge of oil

10 At the end of the title for section A, the words "except in Arctic waters" are added.

Chapter 6
Reception facilities

Regulation 38 – Reception facilities

11 In paragraph 2.5, the words "and paragraph 1.1.1 of part II-A of the Polar Code" are added after the words "regulations 15 and 34 of this Annex".

12 In paragraph 3.5, the words "and paragraph 1.1.1 of part II-A of the Polar Code" are added after the words "regulation 15 of this Annex".

Chapter 11
International Code for Ships Operating in Polar Waters

13 A new chapter 11 is added after existing chapter 10 as follows:

"**Chapter 11 – International Code for Ships Operating in Polar Waters**

Regulation 46 – Definitions

For the purpose of this Annex,

1 Polar Code means the International Code for Ships Operating in Polar Waters, consisting of an introduction, parts I-A and II-A and parts I-B and II-B, adopted by resolutions MSC.385(94) and MEPC.264(68), as may be amended, provided that:

.1 amendments to the environment-related provisions of the introduction and chapter 1 of part II-A of the Polar Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to an appendix to an annex; and

.2 amendments to part II-B of the Polar Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure.

2 *Arctic waters* means those waters which are located north of a line from the latitude 58º00´.0 N and longitude 042º00´.0 W to latitude 64º37´.0 N, longitude 035º27´.0 W and thence by a rhumb line to latitude 67º03´.9 N, longitude 026º33´.4 W and thence by a rhumb line to the latitude 70º49´.56 N and longitude 008º59´.61 W (Sørkapp, Jan Mayen) and by the southern shore of Jan Mayen to 73º31'.6 N and 019º01'.0 E by the Island of Bjørnøya, and thence by a great circle line to the latitude 68º38´.29 N and longitude 043º23´.08 E (Cap Kanin Nos) and hence by the northern shore of the Asian Continent eastward to the Bering Strait and thence from the Bering Strait westward to latitude 60º N as far as Il'pyrskiy and following the 60th North parallel eastward as far as and including Etolin Strait and thence by the northern shore of the North American continent as far south as latitude 60º N and thence eastward along parallel of latitude 60º N, to longitude 056º37´.1 W and thence to the latitude 58º00´.0 N, longitude 042º00´.0 W.

3 *Polar waters* means Arctic waters and/or the Antarctic area.

Regulation 47 – Application and requirements

1 This chapter applies to all ships operating in polar waters.

2 Unless expressly provided otherwise, any ship covered by paragraph 1 of this regulation shall comply with the environment-related provisions of the introduction and with chapter 1 of part II-A of the Polar Code, in addition to any other applicable requirements of this Annex.

3 In applying chapter 1 of part II-A of the Polar Code, consideration should be given to the additional guidance in part II-B of the Polar Code."

Appendix II
Form of IOPP Certificate and Supplements

Appendix

Supplement to the international Oil Pollution Prevention Certificate (IOPP Certificate) – Form A

14 A new section 8 is added after existing section 7 as follows:

"8 Compliance with part II-A – chapter 1 of the Polar Code

8.1 The ship is in compliance with additional requirements in the environment-related provisions of the Introduction and section 1.2 of chapter 1 of part II-A of the Polar Code..... "

Supplement to the international Oil Pollution Prevention Certificate (IOPP Certificate) – Form B

15 A new section 11 is added after existing section 10 as follows:

"11 Compliance with part II-A – chapter 1 of the Polar Code

11.1 The ship is in compliance with additional requirements in the environment-related provisions of the introduction and section 1.2 of chapter I of part II-A of the Polar Code."

ANNEX II
REGULATIONS FOR THE CONTROL OF POLLUTION OF NOXIOUS LIQUID SUBSTANCES IN BULK

Chapter 1
General

Regulation 3 – Exceptions

1 In the chapeau of paragraph 1, between the words "this Annex" and "shall not apply", the words "and chapter 2 of part II-A of the Polar Code" are inserted.

Chapter 6
Measures of control by port States

Regulation 16 – Measures of control

2 In paragraph 3, the reference to "regulation 13 and of this regulation" is replaced with "regulation 13 and of this regulation, and chapter 2 of part II-A of the Polar Code when the ship is operating in Arctic waters,"

Chapter 10
International Code for Ships Operating in Polar Waters

3 A new chapter 10 is added after existing chapter 9 as follows:

"**Chapter 10 – International Code for International Code for Ships Operating in Polar Waters**

Regulation 21 – Definitions

For the purpose of this Annex,

1 *Polar Code* means the International Code for Ships Operating in Polar Waters, consisting of an introduction, part I-A and part II-A and parts I-B and II-B, as adopted by resolutions MSC.385(94) and MEPC.264(68), as may be amended, provided that:

.1 amendments to the environment-related provisions of the introduction and chapter 2 of part II-A of the Polar Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to an appendix to an annex; and

.2 amendments to part II-B of the Polar Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure.

2 *Arctic waters* means those waters which are located north of a line from the latitude 58º00´.0 N and longitude 042º00´.0 W to latitude 64º37´.0 N, longitude 035º27´.0 W and thence by a rhumb line to latitude 67º03´.9 N, longitude 026º33´.4 W and thence by a rhumb line to the latitude 70º49´.56 N and longitude 008º59´.61 W (Sørkapp, Jan Mayen) and by the southern shore of Jan

Mayen to 73º31'.6 N and 019º01'.0 E by the Island of Bjørnøya, and thence by a great circle line to the latitude 68º38´.29 N and longitude 043º23´.08 E (Cap Kanin Nos) and hence by the northern shore of the Asian Continent eastward to the Bering Strait and thence from the Bering Strait westward to latitude 60º N as far as Il'pyrskiy and following the 60th North parallel eastward as far as and including Etolin Strait and thence by the northern shore of the North American continent as far south as latitude 60º N and thence eastward along parallel of latitude 60º N, to longitude 056º37´.1 W and thence to the latitude 58º00´.0 N, longitude 042º00´.0 W.

3 *Polar waters* means Arctic waters and/or the Antarctic area.

Regulation 22 – Application and requirements

1 This chapter applies to all ships certified to carry noxious liquid substances in bulk, operating in polar waters.

2 Unless expressly provided otherwise, any ship covered by paragraph 1 of this regulation shall comply with the environment-related provisions of the introduction and with chapter 2 of part II-A of the Polar Code, in addition to any other applicable requirements of this Annex.

3 In applying chapter 2 of part II-A of the Polar Code, consideration should be given to the additional guidance in part II-B of the Polar Code."

Appendix IV
Standard format for the Procedures and Arrangements Manual

Section 1 – Main features of MARPOL Annex II

4 At the end of paragraph 1.3, the following sentence is added:

"In addition, under chapter 2 of part II-A of the Polar Code, more stringent discharge criteria apply in Arctic waters."

Section 4 – Procedures relating to the cleaning of cargo tanks, the discharge of residues, ballasting and deballasting

5 In paragraph 4.4.3, the words "Antarctic area (the sea area south of latitude 60º S)" are replaced with the words "polar waters".

ANNEX IV
REGULATIONS FOR THE PREVENTION OF POLLUTION BY SEWAGE FROM SHIPS

Chapter 1
General

Regulation 3 – Exceptions

1 The chapeau of paragraph 1 is replaced with the following:

"1 Regulation 11 of this Annex and section 4.2 of chapter 4 of part II-A of the Polar Code, shall not apply to:"

Chapter 7
International Code for Ships Operating in Polar Waters

2 A new chapter 7 is added after existing chapter 6 as follows:

"**Chapter 7 – International Code for Ships Operating in Polar Waters**

Regulation 17 – Definitions

For the purpose of this Annex,

1 *Polar Code* means the International Code for ships operating in polar waters, consisting of an introduction, part I-A and part II-A and parts I-B and II-B, as adopted by resolutions MSC.385(94) and MEPC.264(68), as may be amended, provided that:

.1 amendments to the environment-related provisions of the introduction and chapter 4 of part II-A of the Polar Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to an appendix to an annex; and

.2 amendments to part II-B of the Polar Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure.

2 *Antarctic area* means the sea area south of latitude 60º S.

3 *Arctic waters* means those waters which are located north of a line from the latitude 58º00´.0 N and longitude 042º00´.0 W to latitude 64º37´.0 N, longitude 035º27´.0 W and thence by a rhumb line to latitude 67º03´.9 N, longitude 026º33´.4 W and thence by a rhumb line to the latitude 70º49´.56 N and longitude 008º59´.61 W (Sørkapp, Jan Mayen) and by the southern shore of Jan Mayen to 73º31'.6 N and 019º01'.0 E by the Island of Bjørnøya, and thence by a great circle line to the latitude 68º38´.29 N and longitude 043º23´.08 E (Cap Kanin Nos) and hence by the northern shore of the Asian Continent eastward to the Bering Strait and thence from the Bering Strait westward to latitude 60º N as far as Il'pyrskiy and following the 60th North parallel eastward as far as and including Etolin Strait and thence by the northern shore of the North American continent as far south as latitude 60º N and thence eastward along parallel of latitude 60º N, to longitude 056º37´.1 W and thence to the latitude 58º00´.0 N, longitude 042º00´.0 W.

4 *Polar waters* means Arctic waters and/or the Antarctic area.

Regulation 18 – Application and requirements

1 This chapter applies to all ships certified in accordance with this Annex operating in polar waters.

2 Unless expressly provided otherwise, any ship covered by paragraph 1 of this regulation shall comply with the environment-related provisions of the introduction and with chapter 4 of part II-A of the Polar Code, in addition to any other applicable requirements of this Annex."

ANNEX V
REGULATIONS FOR THE PREVENTION OF POLLUTION BY GARBAGE FROM SHIPS

Chapter 1
General

Regulation 3 – General prohibition on discharge of garbage into the sea

1 In paragraph 1, the reference to "regulation 4, 5, 6 and 7 of this Annex" is replaced with "regulation 4, 5, 6 and 7 of this Annex and section 5.2 of part II-A of the Polar Code, as defined in regulation 13.1 of this Annex."

Regulation 7 – Exceptions

2 The chapeau of paragraph 1 is replaced with the following:

"1 Regulations 3, 4, 5 and 6 of this Annex and section 5.2 of chapter 5 of part II-A of the Polar Code shall not apply to:"

3 Paragraph 2.1 is replaced with the following:

".1 The en route requirements of regulations 4 and 6 of this Annex and chapter 5 of part II-A of the Polar Code shall not apply to the discharge of food wastes where it is clear the retention on board of these food wastes presents an imminent health risk to the people on board."

Regulation 10 – Placards, garbage management plans and garbage record keeping

4 In paragraph 1.1, the words "and section 5.2 of part II-A of the Polar Code" are added after the references to "regulations 3, 4, 5 and 6 of this Annex".

Chapter 3
International Code for Ships Operating in Polar Waters

5 A new chapter 3 is added as follows:

"**Chapter 3 – International Code for Ships Operating in Polar Waters**
Regulation 13 – Definitions

For the purpose of this Annex,

1 *Polar Code* means the International Code for Ships Operating in Polar Waters, consisting of an introduction, part I-A and part II-A and parts I-B and II-B, as adopted by resolutions MSC.385(94) and MEPC.264(68), as may be amended, provided that:

.1 amendments to the environment-related provisions of the introduction and chapter 5 of part II-A of the Polar Code are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to an appendix to an annex; and

.2 amendments to part II-B of the Polar Code are adopted by the Marine Environment Protection Committee in accordance with its Rules of Procedure.

2 *Arctic waters* means those waters which are located north of a line from the latitude 58º00´.0 N and longitude 042º00´.0 W to latitude 64º37´.0 N, longitude 035º27´.0 W and thence by a rhumb line to latitude 67º03´.9 N, longitude 026º33´.4 W and thence by a rhumb line to the latitude 70º49´.56 N and longitude 008º59´.61 W (Sørkapp, Jan Mayen) and by the southern shore of Jan Mayen to 73º31'.6 N and 019º01'.0 E by the Island of Bjørnøya, and thence by a great circle line to the latitude 68º38´.29 N and longitude 043º23´.08 E (Cap Kanin Nos) and hence by the northern shore of the Asian Continent eastward to the Bering Strait and thence from the Bering Strait westward to latitude 60º N as far as Il'pyrskiy and following the 60th North parallel eastward as far as and including Etolin Strait and thence by the northern shore of the North American continent as far south as latitude 60º N and thence eastward along parallel of latitude 60º N, to longitude 056º37´.1 W and thence to the latitude 58º00´.0 N, longitude 042º00´.0 W.

3 *Polar waters* means Arctic waters and/or the Antarctic area.

Regulation 14 – Application and requirements

1 This chapter applies to all ships to which this Annex applies, operating in polar waters.

2 Unless expressly provided otherwise, any ship covered by paragraph 1 of this regulation shall comply with the environment-related provisions of the introduction and with chapter 5 of part II-A of the Polar Code, in addition to any other applicable requirements of this Annex.

3 In applying chapter 5 of part II-A of the Polar Code, consideration should be given to the additional guidance in part II-B of the Polar Code."

Appendix
Form of Garbage Record Book

6 The chapeau of section 4.1.3 is replaced with the following:

"4.1.3 When garbage is discharged into the sea in accordance with regulations 4, 5 or 6 of MARPOL Annex V or chapter 5 of part II-A of the Polar Code:"

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ANNEX 12

RESOLUTION MEPC.266(68)
(adopted on 15 May 2015)

AMENDMENTS TO THE ANNEX OF THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO

Amendments to regulation 12 of MARPOL Annex I

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), which specifies the amendment procedure and confers upon the appropriate body of the Organization the function of considering and adopting amendments thereto,

HAVING CONSIDERED, at its sixty-eight session, proposed amendments to MARPOL Annex I concerning requirements for machinery spaces of all ships,

1 ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to regulation 12 of Annex I, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of MARPOL, that the amendments shall be deemed to have been accepted on 1 July 2016 unless prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of MARPOL, the said amendments shall enter into force on 1 January 2017 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, for the purposes of article 16(2)(e) of MARPOL, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Parties to MARPOL;

5 REQUESTS FURTHER the Secretary-General to transmit copies of the present resolution and its annex to Members of the Organization which are not Parties to MARPOL.

ANNEX

AMENDMENTS TO MARPOL ANNEX I

Chapter 3
Requirements for machinery spaces of all ships

Part A
Construction

Regulation 12 – Tanks for oil residues (sludge)

Paragraphs 1 to 4 of regulation 12 are replaced by the following:

"1 Unless indicated otherwise, this regulation applies to every ship of 400 gross tonnage and above except that paragraph 3.5 of this regulation need only be applied as far as is reasonable and practicable to ships delivered on or before 31 December 1979, as defined in regulation 1.28.1.

2 Oil residue (sludge) may be disposed of directly from the oil residue (sludge) tank(s) to reception facilities through the standard discharge connection referred to in regulation 13, or to any other approved means of disposal of oil residue (sludge), such as an incinerator, auxiliary boiler suitable for burning oil residues (sludge) or other acceptable means which shall be annotated in item 3.2 of the Supplement to IOPP Certificate Form A or B.

3 Oil residue (sludge) tank(s) shall be provided and:

.1 shall be 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;

.2 shall be provided with a designated pump that is capable of taking suction from the oil residue (sludge) tank(s) for disposal of oil residue (sludge) by means as described in regulation 12.2;

.3 shall have no discharge connections to the bilge system, oily bilge water holding tank(s), tank top or oily water separators, except that:

.1 the tank(s) may be fitted with drains, with manually operated self-closing valves and arrangements for subsequent visual monitoring of the settled water, that lead to an oily bilge water holding tank or bilge well, or an alternative arrangement, provided such arrangement does not connect directly to the bilge discharge piping system; and

.2 the sludge tank discharge piping and bilge-water piping may be connected to a common piping leading to the standard discharge connection referred to in regulation 13; the connection of both systems to the possible common

piping leading to the standard discharge connection referred to in regulation 13 shall not allow for the transfer of sludge to the bilge system;

.4 shall not be arranged with any piping that has direct connection overboard, other than the standard discharge connection referred to in regulation 13; and

.5 shall be designed and constructed so as to facilitate their cleaning and the discharge of residues to reception facilities.

4 Ships constructed before 1 January 2017 shall be arranged to comply with paragraph 3.3 of this regulation not later than the first renewal survey carried out on or after 1 January 2017."

***

ANNEX 1

RESOLUTION MEPC.276(70)
(Adopted on 28 October 2016)

AMENDMENTS TO THE ANNEX OF THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO

Amendments to MARPOL Annex I

(Form B of the Supplement to the International Oil Pollution Prevention Certificate)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), which specifies the amendment procedure and confers upon the appropriate body of the Organization the function of considering and adopting amendments thereto,

HAVING CONSIDERED, at its seventieth session, proposed amendments to appendix II of MARPOL Annex I concerning the Supplement to the International Oil Pollution Prevention Certificate,

1 ADOPTS, in accordance with article 16(2)(d) of MARPOL, amendments to appendix II of MARPOL Annex I, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of MARPOL, that the amendments shall be deemed to have been accepted on 1 September 2017 unless prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of MARPOL, the said amendments shall enter into force on 1 March 2018 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, for the purposes of article 16(2)(e) of MARPOL, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Parties to MARPOL;

5 REQUESTS FURTHER the Secretary-General to transmit copies of the present resolution and its annex to Members of the Organization which are not Parties to MARPOL.

ANNEX

AMENDMENTS TO MARPOL ANNEX I
(Form B of the Supplement to the International Oil Pollution Prevention Certificate)

ANNEX I

REGULATIONS FOR THE PREVENTION OF POLLUTION BY OIL

Appendix II

Form of IOPP Certificate and Supplements

Form B of the Supplement to the International Oil Pollution Prevention Certificate

RECORD OF CONSTRUCTION AND EQUIPMENT FOR OIL TANKERS

Section 1 – Particulars of ship

1 Paragraphs 1.11.8 and 1.11.9 are deleted.

Section 5 – Construction (regulations 18, 19, 20, 21, 22, 23, 26, 27, 28 and 33)

2 Paragraph 5.1 is replaced with the following:

"5.1 In accordance with the requirements of regulation 18, the ship is qualified as a segregated ballast tanker in compliance with regulation 18.9 …….. "

3 Existing paragraphs 5.1.1 to 5.1.6 are deleted.

4 Paragraph 5.2 is replaced with the following:

"5.2 Segregated ballast tanks (SBT) in compliance with regulation 18 are distributed as follows:

Tank	Volume (m^3)	Tank	Volume (m^3)
		Total volume……..…….m^3	

"

5 Existing paragraphs 5.2.1 to 5.2.3, 5.3 and 5.3.1 to 5.3.5 are deleted.

6 Existing paragraphs 5.4 and 5.4.1 to 5.4.4 are renumbered as 5.3 and 5.3.1 to 5.3.4.

7 Existing paragraphs 5.5 and 5.5.1 to 5.5.2 are deleted.

8 All subsequent paragraphs in section 5 are renumbered accordingly.

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ANNEX 6

RESOLUTION MEPC.118(52)

Adopted on 15 October 2004

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Revised Annex II of MARPOL 73/78)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED the text of the revised Annex II of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(b), (c) and (d) of the 1973 Convention, the revised Annex II of MARPOL 73/78, the text of which is set out at the annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the revised Annex II of MARPOL 73/78 shall be deemed to have been accepted on 1 July 2006 unless, prior to that date, not less than one-third of the Parties or Parties, the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the revised Annex II of MARPOL 73/78 shall enter into force on 1 January 2007 upon its acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the revised Annex II of MARPOL 73/78 contained in the annex; and

5. REQUESTS FURTHER the Secretary-General to transmit copies of the present resolution and its annex to the Members of the Organization which are not Parties to MARPOL 73/78.

CHAPTER 1 - GENERAL

Regulation 1
Definitions

For the purposes of this Annex:

1 *Anniversary date* means the day and the month of each year which will correspond to the date of expiry of the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk.

2 *Associated piping* means the pipeline from the suction point in a cargo tank to the shore connection used for unloading the cargo and includes all ship's piping, pumps and filters which are in open connection with the cargo unloading line.

3 *Ballast water*

Clean ballast means ballast water carried in a tank which, since it was last used to carry a cargo containing a substance in Category X, Y or Z, has been thoroughly cleaned and the residues resulting there from have been discharged and the tank emptied in accordance with the appropriate requirements of this Annex.

Segregated ballast means ballast water introduced into a tank permanently allocated to the carriage of ballast or cargoes other than oil or Noxious Liquid Substances as variously defined in the Annexes of the present Convention, and which is completely separated from the cargo and oil fuel system.

4 *Chemical Codes*

Bulk Chemical Code means the Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.20(22), as amended by the Organization, provided that such amendments are adopted and brought into force in accordance with the provisions of article 16 of the present Convention concerning amendment procedures applicable to an appendix to an Annex.

International Bulk Chemical Code means the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.19(22), as amended by the Organization, provided that such amendments are adopted and brought into force in accordance with the provisions of article 16 of the present Convention concerning amendment procedures applicable to an appendix to an Annex.

5 *Depth of water* means the charted depth.

6 *En route* means that the ship is under way at sea on a course or courses, including deviation from the shortest direct route, which as far as practicable for navigational purposes, will cause any discharge to be spread over as great an area of the sea as is reasonable and practicable.

7 *Liquid substances* are those having a vapour pressure not exceeding 0.28 MPa absolute at a temperature of 37.8°C.

8 *Manual* means Procedures and Arrangements Manual in accordance with the model given in appendix 6 of this Annex.

9 *Nearest land*. The term “from the nearest land” means from the baseline from which the territorial sea 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 the line drawn from a point on the coast of Australia in:

latitude 11°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 10°41' S, longitude 145°00' E,
thence to a point latitude 13°00' S, longitude 145°00' E,
thence to a point latitude 15°00' S, longitude 146°00' E,
thence to a point latitude 17°30' S, longitude 147°00' E,
thence to a point latitude 21°00' S, longitude 152°55' E,
thence to a point latitude 24°30' S, longitude 154°00' E,
thence to a point on the coast of Australia
in latitude 24°42' S, longitude 153°15' E.

10 *Noxious Liquid Substance* means any substance indicated in the Pollution Category column of chapter 17 or 18 of the International Bulk Chemical Code or provisionally assessed under the provisions of regulation 6.3 as falling into Category X, Y or Z.

11 *PPM* means ml/m^3.

12 *Residue* means any noxious liquid substance which remains for disposal.

13 *Residue/water mixture* means residue to which water has been added for any purpose (e.g. tank cleaning, ballasting, bilge slops).

14 *Ship construction*

14.1 *Ship constructed* means a ship the keel of which is laid or which is at a similar stage of construction. A ship converted to a chemical tanker, irrespective of the date of construction, shall be treated as a chemical tanker constructed on the date on which such conversion commenced. This conversion provision shall not apply to the modification of a ship, which complies with all of the following conditions:

.1 the ship is constructed before 1 July 1986; and

.2 the ship is certified under the Bulk Chemical Code to carry only those products identified by the Code as substances with pollution hazards only.

14.2 *Similar stage of construction* means the stage at which:

.1 construction identifiable with a specific ship begins; and

.2 assembly of that ship has commenced comprising at least 50 tons or one per cent of the estimated mass of all structural material, whichever is less.

15 Solidifying/non-solidifying

15.1 *Solidifying Substance* means a noxious liquid substance which:

.1 in the case of a substance with a melting point of less than 15°C which is at a temperature of less than 5°C above its melting point at the time of unloading; or

.2 in the case of a substances with a melting point of equal to or greater than 15°C which is at a temperature of less than 10°C above its melting point at the time of unloading.

15.2 *Non-solidifying Substance* means a noxious liquid substance, which is not a Solidifying Substance.

16 Tanker

.1 *Chemical tanker* means a ship constructed or adapted for the carriage in bulk of any liquid product listed in chapter 17 of the International Bulk Chemical Code;

.2 *NLS tanker* means a ship constructed or adapted to carry a cargo of Noxious Liquid Substances in bulk and includes an “oil tanker” as defined in Annex I of the present Convention when certified to carry a cargo or part cargo of Noxious Liquid Substances in bulk.

17 Viscosity

.1 *High-Viscosity Substance* means a noxious liquid substance in Category X or Y with a viscosity equal to or greater than 50 mPa.s at the unloading temperature.

.2 *Low-Viscosity Substance* means a noxious liquid substance, which is not a High-Viscosity Substance.

Regulation 2
Application

1 Unless expressly provided otherwise the provisions of this Annex shall apply to all ships certified to carry Noxious Liquid Substances in bulk.

2 Where a cargo subject to the provisions of Annex I of the present Convention is carried in a cargo space of an NLS tanker, the appropriate requirements of Annex I of the present Convention shall also apply.

Regulation 3
Exceptions

1 The discharge requirements of this Annex shall not apply to the discharge into the sea of Noxious Liquid Substances or mixtures containing such substances when such a discharge:

.1 is necessary for the purpose of securing the safety of a ship or saving life at sea; or

.2 results from damage to a ship or its equipment:

.1 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

.2 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

.3 is 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 4
Exemptions

1 With respect to amendments to carriage requirements due to the upgrading of the categorization of a substance, the following shall apply:

.1 where an amendment to this Annex and the International Bulk Chemical Code and Bulk Chemical Code involves changes to the structure or equipment and fittings due to the upgrading of the requirements for the carriage of certain substances, the Administration may modify or delay for a specified period the application of such an amendment to ships constructed before the date of entry into force of that amendment, if the immediate application of such an amendment is considered unreasonable or impracticable. Such relaxation shall be determined with respect to each substance;

.2 the Administration allowing a relaxation of the application of an amendment under this paragraph shall submit to the Organization a report giving details of the ship or ships concerned, the cargoes certified to carry, the trade in which each ship is engaged and the justification for the relaxation, for circulation to the Parties to the Convention for their information and appropriate action, if any and reflect the exemption on the Certificate as referred to in regulation 7 or 9 of this Annex;

.3 Notwithstanding the above, an Administration may exempt ships from the carriage requirements under regulation 11 for ships certified to carry individually identified vegetable oils identified by the relevant footnote in chapter 17 of the IBC Code, provided the ship complies with the following conditions:

.1 Subject to this regulation, the NLS tanker shall meet all requirements for ship type 3 as identified in the IBC Code except for cargo tank location;

.2 under this regulation, cargo tanks shall be located at the following distances inboard. The entire cargo tank length shall be protected by ballast tanks or spaces other than tanks that carry oil as follows:

.1 wing tanks or spaces shall be arranged such that cargo tanks are located inboard of the moulded line of the side shell plating nowhere less than 760 mm;

.2 double bottom tanks or spaces shall be arranged such that the distance 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 is not less than B/15 (m) or 2.0 m at the centreline, whichever is the lesser. The minimum distance shall be 1.0 metre; and

.3 the relevant certificate shall indicate the exemption granted.

2 Subject to the provisions of paragraph 3 of this regulation, the provisions of regulation 12.1 need not apply to a ship constructed before 1 July 1986 which is engaged in restricted voyages as determined by the Administration between:

.1 ports or terminals within a State Party to the present Convention; or

.2 ports or terminals of States Parties to the present Convention.

3 The provisions of paragraph 2 of this regulation shall only apply to a ship constructed before 1 July 1986 if:

.1 each time a tank containing Category X, Y or Z substances or mixtures is to be washed or ballasted, the tank is washed in accordance with a prewash procedure approved by the Administration in compliance with appendix 6 of this Annex, and the tank washings are discharged to a reception facility;

.2 subsequent washings or ballast water are discharged to a reception facility or at sea in accordance with other provisions of this Annex;

.3 the adequacy of the reception facilities at the ports or terminals referred to above, for the purpose of this paragraph, is approved by the Governments of the States Parties to the present Convention within which such ports or terminals are situated;

.4 in the case of ships engaged in voyages to ports or terminals under the jurisdiction of other States Parties to the present Convention, the Administration communicates to the Organization, for circulation to the Parties to the Convention, particulars of the exemption, for their information and appropriate action, if any; and

.5 the certificate required under this Annex is endorsed to the effect that the ship is solely engaged in such restricted voyages.

4 For a ship whose constructional and operational features are such that ballasting of cargo tanks is not required and cargo tank washing is only required for repair or dry-docking, the Administration may allow exemption from the provisions of regulation 12, provided that all of the following conditions are complied with:

.1 the design, construction and equipment of the ship are approved by the Administration, having regard to the service for which it is intended;

.2 any effluent from tank washings which may be carried out before a repair or dry-docking is discharged to a reception facility, the adequacy of which is ascertained by the Administration;

.3 the certificate required under this Annex indicates:

.1 that each cargo tank is certified for the carriage of a restricted number of substances which are comparable and can be carried alternately in the same tank without intermediate cleaning; and

.2 the particulars of the exemption;

.4 the ship carries a Manual approved by the Administration; and

.5 in the case of ships engaged in voyages to ports or terminals under the jurisdiction of other States Parties to the present Convention, the Administration communicates to the Organization, for circulation to the Parties to the Convention, particulars of the exemption, for their information and appropriate action, if any.

Regulation 5
Equivalents

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 the substitution of operational methods to effect the control of discharge of Noxious Liquid Substances 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 alternative to that required by this Annex, under paragraph 1 of this regulation, shall communicate to the Organization for circulation to the Parties to the Convention, particulars thereof, for their information and appropriate action, if any.

3 Notwithstanding the provisions of paragraphs 1 and 2 of this regulation, the construction and equipment of liquefied gas carriers certified to carry Noxious Liquid Substances listed in the applicable Gas Carrier Code, shall be deemed to be equivalent to the construction and equipment requirements contained in regulations 11 and 12 of this Annex, provided that the gas carrier meets all following conditions:

.1 hold a Certificate of Fitness in accordance with the appropriate Gas Carrier Code for ships certified to carry liquefied gases in bulk;

.2 hold an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk, in which it is certified that the gas carrier may carry only those Noxious Liquid Substances identified and listed in the appropriate Gas Carrier Code;

.3 be provided with segregated ballast arrangements;

.4 be provided with pumping and piping arrangements, which, to the satisfaction of the Administration, ensure that the quantity of cargo residue remaining in the tank and its associated piping after unloading does not exceed the applicable quantity of residue as required by regulation 12.1, 12.2 or 12.3; and

.5 be provided with a Manual, approved by the Administration, ensuring that no operational mixing of cargo residues and water will occur and that no cargo residues will remain in the tank after applying the ventilation procedures prescribed in the Manual.

CHAPTER 2 - CATEGORIZATION OF NOXIOUS LIQUID SUBSTANCES

Regulation 6
Categorization and listing of Noxious Liquid Substances and other substances

1 For the purpose of the regulations of this Annex, Noxious Liquid Substances shall be divided into four categories as follows:

.1 Category X: Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a major hazard to either marine resources or human health and, therefore, justify the prohibition of the discharge into the marine environment;

.2 Category Y: Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a hazard to either marine resources or human health or cause harm to amenities or other legitimate uses of the sea and therefore justify a limitation on the quality and quantity of the discharge into the marine environment;

.3 Category Z: Noxious Liquid Substances which, if discharged into the sea from tank cleaning or deballasting operations, are deemed to present a minor hazard to either marine resources or human health and therefore justify less stringent restrictions on the quality and quantity of the discharge into the marine environment;

.4 Other Substances: substances indicated as OS (Other Substances) in the pollution category column of chapter 18 of the International Bulk Chemical Code which have been evaluated and found to fall outside Category X, Y or Z as defined in regulation 6.1 of this Annex because they are, at present, considered to present no harm to marine resources, human health, amenities or other legitimate uses of the sea when discharged into the sea from tank cleaning of deballasting operations. The discharge of bilge or ballast water or other residues or mixtures containing only substances referred to as “Other Substances” shall not be subject to any requirements of the Annex.

2 Guidelines for use in the categorization of Noxious Liquid Substances are given in appendix 1 to this Annex.

3 Where it is proposed to carry a liquid substance in bulk which has not been categorized under paragraph 1 of this regulation, the Governments of Parties to the Convention involved in the proposed operation shall establish and agree on a provisional assessment for the proposed operation on the basis of the guidelines referred to in paragraph 2 of this regulation. Until full agreement among the Governments involved has been reached, the substance shall not be carried. As soon as possible, but not later than 30 days after the agreement has been reached, the Government of the producing or shipping country, initiating the agreement concerned, shall notify the Organization and provide details of the substance and the provisional assessment for annual circulation to all Parties for their information. The Organization shall maintain a register of all such substances and their provisional assessment until such time as the substances are formally included in the IBC Code.

CHAPTER 3 - SURVEYS AND CERTIFICATION

Regulation 7
Survey and certification of chemical tankers

Notwithstanding the provisions of regulations 8, 9, and 10 of this Annex, chemical tankers which have been surveyed and certified by States Parties to the present Convention in accordance with the provisions of the International Bulk Chemical Code or the Bulk Chemical Code, as applicable, shall be deemed to have complied with the provisions of the said regulations, and the certificate issued under that Code shall have the same force and receive the same recognition as the certificate issued under regulation 9 of this Annex.

Regulation 8
Surveys

1 Ships carrying Noxious Liquid Substances in bulk shall be subject to the surveys specified below:

.1 An initial survey before the ship is put in service or before the Certificate required under regulation 9 of this Annex is issued for the first time, and 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.

.2 A renewal survey at intervals specified by the Administration, but not exceeding 5 years, except where regulation 10.2, 10.5, 10.6, 10.7 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.

.3 An intermediate survey within 3 months before or after the second anniversary date or within 3 months before or after the third anniversary date of the Certificate which shall take the place of one of the annual surveys specified in paragraph 1.4 of this regulation. The intermediate survey shall be such as to ensure that the equipment and associated pump and piping 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 9 of this Annex.

.4 An annual survey within 3 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 1.1 of this regulation to ensure that they have been maintained in accordance with paragraph 3 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 9 of this Annex.

.5 An additional survey either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in paragraph 3 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.

2.1 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.

2.2 The recognized organization, referred to in paragraph 2.1 of this paragraph shall comply with the Guidelines adopted by the Organization by resolution A.739(18), as may be amended by the Organization, and the specification adopted by the Organization by resolution A.789(19), as may be amended by the Organization, provided that such amendments are adopted, brought into force and take effect in accordance with the provisions of article 16 of the present Convention concerning the amendment procedures applicable to this Annex.

2.3 An Administration nominating surveyors or recognizing organizations to conduct surveys as set forth in paragraph 2.1 of this regulation shall, as a minimum, empower any nominated surveyor or recognized organization to:

.1 require repairs to a ship; and

.2 carry out surveys if requested by the appropriate authorities of a port State.

2.4 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 Convention for the information of their officers.

2.5 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.

2.6 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.

3.1 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.

3.2 After any survey of the ship required 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.

3.3 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 9
Issue or endorsement of Certificate

1 An International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk shall be issued, after an initial or renewal survey in accordance with the provisions of regulation 8 of this Annex, to any ship intended to carry Noxious Liquid Substances in bulk and which is engaged in voyages to ports or 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 person or organization duly authorized by it. In every case, the Administration assumes full responsibility for the Certificate.

3.1 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 Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk to the ship and, where appropriate, endorse or authorize the endorsement of that Certificate on the ship, in accordance with this Annex.

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

3.3 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 paragraph 1 of this regulation.

3.4 No International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk shall be issued to a ship, which is entitled to fly the flag of a State which is not a party.

4 The International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk shall be drawn up in the form corresponding to the model given in appendix 3 to this Annex and shall be at least in English, French or Spanish. Where entries in an official national language of the State whose flag the ship is entitled to fly are also used, this shall prevail in the case of a dispute or discrepancy.

Regulation 10
Duration and validity of Certificate

1 An International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk shall be issued for a period specified by the Administration which shall not exceed 5 years.

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

2.2 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 5 years from the date of expiry of the existing Certificate.

2.3 When the renewal survey is completed more than 3 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 5 years from the date of completion of the renewal survey.

3 If a Certificate is issued for a period of less than 5 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 8.1.3 and 8.1.4 of this Annex applicable when a Certificate is issued for a period of 5 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 5 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 Certificates shall be extended for a period longer than 3 months, and a ship to which an extension is granted shall not, on its arrival in the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port without having a new Certificate. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding 5 years from the date of expiry of the existing Certificate before the extension was granted.

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 5 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 2.2, 5 or 6 of this regulation. In these special circumstances, the new Certificate shall be valid to a date not exceeding 5 years from the date of completion of the renewal survey.

8 If an annual or intermediate survey is completed before the period specified in regulation 8 of this Annex, then:

.1 the anniversary date shown on the Certificate shall be amended by endorsement to a date which shall not be more than 3 months later than the date on which the survey was completed;

.2 the subsequent annual or intermediate survey required by regulation 8 of this Annex shall be completed at the intervals prescribed by that regulation using the new anniversary date;

.3 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 8 of this Annex are not exceeded.

9 A Certificate issued under regulation 9 of this Annex shall cease to be valid in any of the following cases:

.1 if the relevant surveys are not completed within the periods specified under regulation 8.1 of this Annex;

.2 if the Certificate is not endorsed in accordance with regulation 8.1.3 or 8.1.4 of this Annex;

.3 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 8.3.1 and 8.3.2 of this Annex. In the case of a transfer between Parties, if requested within 3 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.

CHAPTER 4 - DESIGN, CONSTRUCTION, ARRANGEMENT AND EQUIPMENT

Regulation 11
Design, construction, equipment and operations

1 The design, construction, equipment and operation of ships certified to carry Noxious Liquid Substances in bulk identified in chapter 17 of the International Bulk Chemical Code, shall be in compliance with the following provisions to minimize the uncontrolled discharge into the sea of such substances:

.1 the International Bulk Chemical Code when the chemical tanker is constructed on or after 1 July 1986; or

.2 the Bulk Chemical Code as referred to in paragraph 1.7.2 of that Code for:

.1 ships for which the building contract is placed on or after 2 November 1973 but constructed before 1 July 1986, and which are engaged on voyages to ports or terminals under the jurisdiction of other States Parties to the Convention; and

.2 ships constructed on or after 1 July 1983 but before 1 July 1986, which are engaged solely on voyages between ports or terminals within the State the flag of which the ship is entitled to fly.

.3 The Bulk Chemical Code as referred to in paragraph 1.7.3 of that Code for:

.1 ships for which the building contract is placed before 2 November 1973 and which are engaged on voyages to ports or terminals under the jurisdiction of other States Parties to the Convention; and

.2 ships constructed before 1 July 1983, which are solely engaged on, voyages between ports or terminals within the State the flag of which the ship is entitled to fly.

2 In respect of ships other than chemical tankers or liquefied gas carriers certified to carry Noxious Liquid Substances in bulk identified in chapter 17 of the International Bulk Chemical Code, the Administration shall establish appropriate measures based on the Guidelines[*] developed by the Organization in order to ensure that the provisions shall be such as to minimize the uncontrolled discharge into the sea of such substances.

Regulation 12
Pumping, piping, unloading arrangements and slop tanks

1 Every ship constructed before 1 July 1986 shall be provided with a pumping and piping arrangement to ensure that each tank certified for the carriage of substances in Category X or Y does not retain a quantity of residue in excess of 300 litres in the tank and its associated piping and that each tank certified for the carriage of substances in Category Z does not retain a quantity of residue in excess of 900 litres in the tank and its associated piping. A performance test shall be carried out in accordance with appendix 5 of this Annex.

[*] Reference is made to resolutions A.673(16) and MEPC.120(52).

2 Every ship constructed on or after 1 July 1986 but before 1 January 2007 shall be provided with a pumping and piping arrangement to ensure that each tank certified for the carriage of substances in Category X or Y does not retain a quantity of residue in excess of 100 litres in the tank and its associated piping and that each tank certified for the carriage of substances in Category Z does not retain a quantity of residue in excess of 300 litres in the tank and its associated piping. A performance test shall be carried out in accordance with appendix 5 of this Annex.

3 Every ship constructed on or after 1 January 2007 shall be provided with a pumping and piping arrangement to ensure that each tank certified for the carriage of substances in Category X, Y or Z does not retain a quantity of residue in excess of 75 litres in the tank and its associated piping. A performance test shall be carried out in accordance with appendix 5 of this Annex.

4 For a ship other than a chemical tanker constructed before 1 January 2007 which cannot meet the requirements for the pumping and piping arrangements for substances in Category Z referred to in paragraphs 1 and 2 of this regulation no quantity requirement shall apply. Compliance is deemed to be reached if the tank is emptied to the most practicable extent.

5 Pumping performance tests referred to in paragraphs 1, 2 and 3 of this regulation shall be approved by the Administration. Pumping performance tests shall use water as the test medium.

6 Ships certified to carry substances of Category X, Y or Z shall have an underwater discharge outlet (or outlets).

7 For ships constructed before 1 January 2007 and certified to carry substances in Category Z an underwater discharge outlet as required under paragraph 6 of this regulation is not mandatory.

8 The underwater discharge outlet (or outlets) shall be located within the cargo area in the vicinity of the turn of the bilge and shall be so arranged as to avoid the re-intake of residue/water mixtures by the ship's seawater intakes.

9 The underwater discharge outlet arrangement shall be such that the residue/water mixture discharged into the sea will not pass through the ship's boundary layer. To this end, when the discharge is made normal to the ship's shell plating, the minimum diameter of the discharge outlet is governed by the following equation:

$$d = \frac{Q_d}{5L_d}$$

where:

d	=	minimum diameter of the discharge outlet (m)
L_d	=	distance from the forward perpendicular to the discharge outlet (m)
Q_d	=	the maximum rate selected at which the ship may discharge a residue/water mixture through the outlet (m^3/h).

10 When the discharge is directed at an angle to the ship's shell plating, the above relationship shall be modified by substituting for Q_d the component of Q_d which is normal to the ship's shell plating.

11 *Slop tanks*

Although this Annex does not require the fitting of dedicated slop tanks, slop tanks may be needed for certain washing procedures. Cargo tanks may be used as slop tanks.

CHAPTER 5 - OPERATIONAL DISCHARGES OF RESIDUES OF NOXIOUS LIQUID SUBSTANCES

Regulation 13
Control of discharges of residues of Noxious Liquid Substances

Subject to the provisions of regulation 3 of this Annex the control of discharges of residues of Noxious Liquid Substances or ballast water, tank washings or other mixtures containing such substances shall be in compliance with the following requirements.

1 ***Discharge provisions***

1.1 The discharge into the sea of residues of substances assigned to Category X, Y or Z or of those provisionally assessed as such or ballast water, tank washings or other mixtures containing such substances shall be prohibited unless such discharges are made in full compliance with the applicable operational requirements contained in this Annex.

1.2 Before any prewash or discharge procedure is carried out in accordance with this regulation, the relevant tank shall be emptied to the maximum extent in accordance with the procedures prescribed in the Manual.

1.3 The carriage of substances which have not been categorized, provisionally assessed or evaluated as referred to in regulation 6 of this Annex or of ballast water, tank washings or other mixtures containing such residues shall be prohibited along with any consequential discharge of such substances into the sea.

2 ***Discharge standards***

2.1 Where the provisions in this regulation allow the discharge into the sea of residues of substances in Category X, Y or Z or of those provisionally assessed as such or ballast water, tank washings or other mixtures containing such substances the following discharge standards shall apply:

.1 the ship is proceeding en route at a speed of at least 7 knots in the case of self-propelled ships or at least 4 knots in the case of ships which are not self-propelled;

.2 the discharge is made below the waterline through the underwater discharge outlet(s) not exceeding the maximum rate for which the underwater discharge outlet(s) is (are) designed; and

.3 the discharge is made at a distance of not less than 12 nautical miles from the nearest land in a depth of water of not less than 25 metres.

2.2 For ships constructed before 1 January 2007 the discharge into the sea of residues of substances in Category Z or of those provisionally assessed as such or ballast water, tank washings or other mixtures containing such substances below the waterline is not mandatory.

2.3 The Administration may waive the requirements of paragraph 2.1.3 for substances in Category Z, regarding the distance of not less than 12 nautical miles from the nearest land for

ships solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the State the flag, of which, the ship is entitled to fly. In addition, the Administration may waive the same requirement regarding the discharge distance of not less than 12 nautical miles from the nearest land for a particular ship entitled to fly the flag of their State, when engaged in voyages within waters subject to the sovereignty or jurisdiction of one adjacent state after the establishment of an agreement, in writing, of a waiver between the two coastal States involved provided that no third party will be affected. Information on such agreement shall be communicated to the Organization within 30 days for further circulation to the Parties to the Convention for their information and appropriate action if any.

3 ***Ventilation of cargo residues***

Ventilation procedures approved by the Administration may be used to remove cargo residues from a tank. Such procedures shall be in accordance with appendix 7 of this Annex. Any water subsequently introduced into the tank shall be regarded as clean and shall not be subject to the discharge requirements in this Annex.

4 ***Exemption for a prewash***

On request of the ship's master an exemption for a prewash may be granted by the Government of the receiving Party, where it is satisfied that:

.1 the unloaded tank is to be reloaded with the same substance or another substance compatible with the previous one and that the tank will not be washed or ballasted prior to loading; or

.2 the unloaded tank is neither washed nor ballasted at sea. The prewash in accordance with the applicable paragraph of this regulation shall be carried out at another port provided that it has been confirmed in writing that a reception facility at that port is available and is adequate for such a purpose; or

.3 the cargo residues will be removed by a ventilation procedure approved by the Administration in accordance with appendix 7 of this Annex.

5 ***The use of cleaning agents or additives***

5.1 When a washing medium other than water, such as mineral oil or chlorinated solvent, is used instead of water to wash a tank, its discharge shall be governed by the provisions of either Annex I or Annex II, which would apply to the medium had it been carried as cargo. Tank washing procedures involving the use of such a medium shall be set out in the Manual and be approved by the Administration.

5.2 When small amounts of cleaning additives (detergent products) are added to water in order to facilitate tank washing, no additives containing Pollution Category X components shall be used except those components that are readily biodegradable and present in a total concentration of less than 10% of the cleaning additive. No restrictions additional to those applicable to the tank due to the previous cargo shall apply.

6 Discharge of residues of Category X

6.1 Subject to the provision of paragraph 1, the following provisions shall apply:

.1 A tank from which a substance in Category X has been unloaded, shall be prewashed before the ship leaves the port of unloading. The resulting residues shall be discharged to a reception facility until the concentration of the substance in the effluent to such facility, as indicated by analyses of samples of the effluent taken by the surveyor, is at or below 0.1% by weight. When the required concentration level has been achieved, remaining tank washings shall continue to be discharged to the reception facility until the tank is empty. Appropriate entries of these operations shall be made in the Cargo Record Book and endorsed by the surveyor referred to in regulation 16.1.

.2 Any water subsequently introduced into the tank may be discharged into the sea in accordance with the discharge standards in regulation 13.2.

.3 Where the Government of the receiving party is satisfied that it is impracticable to measure the concentration of the substance in the effluent without causing undue delay to the ship, that Party may accept an alternative procedure as being equivalent to obtain the required concentration in regulation 13.6.1.1 provided that:

.1 the tank is prewashed in accordance with a procedure approved by the Administration in compliance with appendix 6 of this Annex; and

.2 appropriate entries shall be made in the Cargo Record Book and endorsed by the surveyor referred to in regulation 16.1.

7 *Discharge of residues of Category Y and Z*

7.1 Subject to the provision of paragraph 1, the following provisions shall apply:

.1 With respect to the residue discharge procedures for substances in Category Y or Z the discharge standards in regulation 13.2 shall apply.

.2 If the unloading of a substance of Category Y or Z is not carried out in accordance with the Manual, a prewash shall be carried out before the ship leaves the port of unloading, unless alternative measures are taken to the satisfaction of the surveyor referred to in regulation 16. 1 of this Annex to remove the cargo residues from the ship to quantities specified in this Annex. The resulting tank washings of the prewash shall be discharged to a reception facility at the port of unloading or another port with a suitable reception facility provided that it has been confirmed in writing that a reception facility at that port is available and is adequate for such a purpose.

.3 For High-Viscosity or Solidifying Substances in Category Y the following shall apply:

.1 a prewash procedure as specified in appendix 6 shall be applied;

.2 the residue/water mixture generated during the prewash shall be discharged to a reception facility until the tank is empty; and

.3 any water subsequently introduced into the tank may be discharged into the sea in accordance with the discharge standards in regulation 13.2.

7.2 Operational requirements for ballasting and deballasting

7.2.1 After unloading, and, if required, after a prewash, a cargo tank may be ballasted. Procedures for the discharge of such ballast are set out in regulation 13.2.

7.2.2 Ballast introduced into a cargo tank which has been washed to such an extent that the ballast contains less than 1 ppm of the substance previously carried, may be discharged into the sea without regard to the discharge rate, ship's speed and discharge outlet location, provided that the ship is not less than 12 miles from the nearest land and in water that is not less than 25 metres deep. The required degree of cleanliness has been achieved when a prewash as specified in appendix 6 has been carried out and the tank has been subsequently washed with a complete cycle of the cleaning machine for ships built before 1 July 1994 or with a water quantity not less than that calculated with k=1.0.

7.2.3 The discharge into the sea of clean or segregated ballast shall not be subject to the requirements of this Annex.

8 *Discharges in the Antarctic Area*

8.1 *Antarctic Area* means the sea area south of latitude 60°S.

8.2 In the Antarctic area any discharge into the sea of Noxious Liquid Substances or mixtures containing such substances is prohibited.

Regulation 14
Procedures and Arrangements Manual

1 Every ship certified to carry substances of Category X, Y or Z shall have on board a Manual approved by the Administration. The Manual shall have a standard format in compliance with appendix 4 to this Annex. In the case of a ship engaged in international voyages on which the language used is not English, French or Spanish, the text shall include a translation into one of these languages.

2 The main purpose of the Manual is to identify for the ship's officers the physical arrangements and all the operational procedures with respect to cargo handling, tank cleaning, slops handling and cargo tank ballasting and deballasting which must be followed in order to comply with the requirements of this Annex.

Regulation 15
Cargo record book

1 Every ship to which this Annex applies shall be provided with a Cargo Record Book, whether as part of the ship's official logbook or otherwise, in the form specified in appendix 2 to this Annex.

2 After completion of any operation specified in appendix 2 to this Annex, the operation shall be promptly recorded in the Cargo Record Book.

3 In the event of an accidental discharge of a noxious liquid substance or a mixture containing such a substance or a discharge under the provisions of regulation 3 of this Annex, an entry shall be made in the Cargo Record Book stating the circumstances of, and the reason for, the discharge.

4 Each entry shall be signed by the officer or officers in charge of the operation concerned and each page shall be signed by the master of the ship. The entries in the Cargo Record Book, for ships holding an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk or a certificate referred to in regulation 7 of this Annex shall be at least in English, French or Spanish. Where entries in an official national language of the State whose flag the ship is entitled to fly are also used, this shall prevail in case of a dispute or discrepancy.

5 The Cargo Record Book shall be kept in such a place as to be readily available for inspection and, except in the case of unmanned ships under tow, shall be kept on board the ship. It shall be retained for a period of three years after the last entry has been made.

6 The competent authority of the Government of a Party may inspect the Cargo Record Book on board any ship to which this Annex applies while the ship is in its port, 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 Cargo Record Book shall be made admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of a Cargo 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.

CHAPTER 6 – MEASURES OF CONTROL BY PORT STATES

Regulation 16
Measures of control

1 The Government of each Party to the Convention shall appoint or authorize surveyors for the purpose of implementing this regulation. The surveyors shall execute control in accordance with control procedures developed by the Organization.*

2 When a surveyor appointed or authorized by the Government of the Party to the Convention has verified that an operation has been carried out in accordance with the requirements of the Manual, or has granted an exemption for a prewash, then that surveyor shall make an appropriate entry in the Cargo Record Book.

3 The master of a ship certified to carry Noxious Liquid Substances in bulk shall ensure that the provisions of regulation 13 and of this regulation have been complied with and that the Cargo Record Book is completed in accordance with regulation 15 whenever operations as referred to in that regulation take place.

4 A tank which has carried a Category X substance shall be prewashed in accordance with regulation 13.6. The appropriate entries of these operations shall be made in the Cargo Record Book and endorsed by the surveyor referred to under paragraph 1 of this regulation.

5 Where the Government of the receiving party is satisfied that it is impracticable to measure the concentration of the substance in the effluent without causing undue delay to the ship, that Party may accept the alternative procedure referred to in regulation 13.6.3 provided that the surveyor referred to under paragraph 1 of this regulation certifies in the Cargo Record Book that:

.1 the tank, its pump and piping systems have been emptied; and

.2 the prewash has been carried out in accordance with the provisions of appendix 6 of this Annex; and

.3 the tank washing resulting from such prewash have been discharged to a reception facility and the tank is empty.

6 At the request of the ship's master, the Government of the receiving Party may exempt the ship from the requirements for a prewash referred to in the applicable paragraphs of regulation 13, when one of the conditions of regulation 13.4 is met.

7 An exemption referred to in paragraph 6 of this regulation may only be granted by the Government of the receiving Party to a ship engaged in voyages to ports or terminals under the jurisdiction of other States Parties to the present Convention. When such an exemption has been granted, the appropriate entry made in the Cargo Record Book shall be endorsed by the surveyor referred to in paragraph 1 of this regulation.

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* Refer to the Procedures for port State control adopted by the Organization by resolution A.787(19) as amended by A.882(21).

8 If the unloading is not carried out in accordance with the pumping conditions for the tank approved by the Administrations and based on appendix 5 of this Annex, alternative measures may be taken to the satisfaction of the surveyor referred to in paragraph 1 of this regulation to remove the cargo residues from the ship to quantities specified in regulation 12 as applicable. The appropriate entries shall be made in the Cargo Record Book.

9 ***Port State control on operational requirements***[*]

9.1 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 Noxious Liquid Substances.

9.2 In the circumstances given in paragraph 9.1 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.

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

9.4 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.

[*] Refer to the Procedures for port State control adopted by the Organization by resolution A.787(19) as amended by A.882(21)

CHAPTER 7 - PREVENTION OF POLLUTION ARISING FROM AN INCIDENT INVOLVING NOXIOUS LIQUID SUBSTANCES

Regulation 17
Shipboard marine pollution emergency plan for Noxious Liquid Substances

1 Every ship of 150 gross tonnage and above certified to carry Noxious Liquid Substances in bulk shall carry on board a shipboard marine pollution emergency plan for Noxious Liquid Substances approved by the Administration.

2 Such a plan shall be based on the Guidelines* developed by the Organization and written in a working language or languages understood by the master and officers. The plan shall consist at least of:

.1 the procedure to be followed by the master or other persons having charge of the ship to report a Noxious Liquid Substances pollution incident, as required in article 8 and Protocol I of the present Convention, based on the Guidelines developed by the Organization**;

.2 the list of authorities or persons to be contacted in the event of a Noxious Liquid Substances pollution incident;

.3 a detailed description of the action to be taken immediately by persons on board to reduce or control the discharge of Noxious Liquid Substances following the incident; and

.4 the procedures and point of contact on the ship for co-ordinating shipboard action with national and local authorities in combating the pollution.

3 In the case of ships to which regulation 37 of Annex I of the Convention also applies, such a plan may be combined with the shipboard oil pollution emergency plan required under regulation 37 of Annex I of the Convention. In this case, the title of such a plan shall be “Shipboard marine pollution emergency plan”.

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* Refer to “Guidelines for the development of shipboard marine pollution emergency plans for oil and/or Noxious Liquid Substances” adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.85(44), as amended by resolution MEPC. …….(53).

** Refer to 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.851(20).

CHAPTER 8 - RECEPTION FACILITIES

Regulation 18
Reception facilities and cargo unloading terminal arrangements

1 The Government of each Party to the Convention undertakes to ensure the provision of reception facilities according to the needs of ships using its ports, terminals or repair ports as follows:

.1 ports and terminals involved in ships' cargo handling shall have adequate facilities for the reception of residues and mixtures containing such residues of Noxious Liquid Substances resulting from compliance with this Annex, without undue delay for the ships involved.

.2 ship repair ports undertaking repairs to NLS tankers shall provide facilities adequate for the reception of residues and mixtures containing Noxious Liquid Substances for ships calling at that port.

2 The Government of each Party shall determine the types of facilities provided for the purpose of paragraph 1 of this regulation at each cargo loading and unloading port, terminal and ship repair port in its territories and notify the Organization thereof.

3 The Governments of Parties to the Convention, the coastlines of which border on any given special area, shall collectively agree and establish a date by which time the requirement of paragraph 1 of this regulation will be fulfilled and from which the requirements of the applicable paragraphs of regulation 13 in respect of that area shall take effect and notify the Organization of the date so established at least six months in advance of that date. The Organization shall then promptly notify all Parties of that date.

4 The Government of each Party to the Convention shall undertake to ensure that cargo unloading terminals shall provide arrangements to facilitate stripping of cargo tanks of ships unloading Noxious Liquid Substances at these terminals. Cargo hoses and piping systems of the terminal, containing Noxious Liquid Substances received from ships unloading these substances at the terminal, shall not be drained back to the ship.

5 Each Party shall notify the Organization, for transmission to the Parties concerned, of any case where facilities required under paragraph 1 or arrangements required under paragraph 3 of this regulation are alleged to be inadequate.

APPENDICES TO ANNEX II

APPENDIX 1

GUIDELINES FOR THE CATEGORIZATION OF NOXIOUS LIQUID SUBSTANCES*

Products are assigned to Pollution Categories based on an evaluation of their properties as reflected in the resultant GESAMP Hazard Profile as shown in the table below:

Rule	A1 Bio-accumulation	A2 Bio-degradation	B1 Acute toxicity	B2 Chronic toxicity	D3 Long-term health effects	E2 Effects on marine wildlife and on benthic habitats	Cat
1			≥ 5				
2	≥ 4		4				
3		NR	4				
4	≥ 4	NR			CMRTNI		***X***
5			4				
6			3				
7			2				
8	≥ 4	NR		Not 0			
9				≥ 1			**Y**
10						Fp,F or S If not Inorganic	
11					CMRTNI		
12	Any product not meeting the criteria of rules 1 to 11 and 13						**Z**
13	All products identified as: ≤2 in column A1; R in column A2; blank in column D3; not Fp, F or S (if not organic) in column E2; and 0 (zero) in all other columns of the GESAMP Hazard Profile						**OS**

* Reference is made to the Guidelines for provisional assessment of chemicals, MEPC/Circ.265 as amended.

Abbreviated legend to the revised GESAMP Hazard Evaluation Procedure

Columns A and B - Aquatic Environment					
	A			B	
	Bioaccumulation and Biodegradation			Aquatic Toxicity	
Numerical Rating	A 1* Bioaccumulation		A 2* Biodegradation	B 1* Acute Toxicity	B 2* Chronic Toxicity
	log Pow	BCF		LC/EC/IC_{50} (mg/l)	NOEC (mg/l)
0	<1 or > ca. 7	not measurable	R: readily biodegradable NR: not readily Biodegradable	>1000	>1
1	≥1 - <2	≥1 - <10		>100 - ≤1000	>0.1 - ≤1
2	≥2 - <3	≥10 - <100		>10 - ≤100	>0.01 - ≤0.1
3	≥3 - >4	≥100 - <500		>1 - ≤10	>0.001 - ≤0.01
4	≥4 - <5	≥500 - <4000		>0.1 - ≤1	≤0.001
5	≥5	≥4000		>0.01 - ≤0.1	
6				≤0.01	

Columns C and D - Human Health (Toxic effects to mammals)						
		C		D		
	Acute Mammalian Toxicity			Irritation, Corrosion & Long term health effects		
Numerical Ratings	C 1 Oral Toxicity LD_{50} (mg/kg)	C 2 Percutaneous Toxicity LD_{50} (mg/kg)	C 3 Inhalation Toxicity LC_{50} (mg/l)	D 1 Skin irritation & corrosion	D 2 Eye irritation & corrosion	D3* Long term health effects
0	>2000	>2000	>20	not irritating	not irritating	C - Carcinogen M - Mutagenic R - Reprotoxic S - Sensitizing A -Aspiration haz. T - Target organ systemic toxicity L - Lung injury N - Neurotoxic I - Immunotoxic
1	>300 - ≤2000	>1000 -≤2000	>10 - ≤20	mildly irritating	mildly irritating	
2	>50 -≤300	>200 -≤1000	>2 - ≤10	irritating	irritating	
3	>5 - ≤50	>50 - ≤200	>0.5 - ≤2	3 Severely irritating or corrosive 3A Corr. (≤4hr) 3B Corr. (≤1hr) 3C Corr. (≤3m)	severely irritating	
4	≤5	≤50	≤0.5			

Column E Interferences with other Uses of the Sea			
E 1 Tainting	E 2* Physical effects on Wildlife & benthic habitats	E 3 Interference with Coastal Amenities	
		Numerical Rating	Description & Action
NT:not tainting (tested) T: tainting test positive	Fp: Persistent Floater F: Floater S: Sinking Substances	0	no interference **no warning**
		1	slightly objectionable **warning, no closure of amenity**
		2	moderately objectionable **possible closure of amenity**
		3	highly objectionable **closure of amenity**

* These columns are used to define Pollution Categories

APPENDIX 2

FORM OF CARGO RECORD BOOK FOR SHIPS CARRYING NOXIOUS LIQUID SUBSTANCES IN BULK

CARGO RECORD BOOK FOR SHIPS CARRYING NOXIOUS LIQUID SUBSTANCES IN BULK

Name of ship…….

Distinctive number or letters…….

IMO Number…….

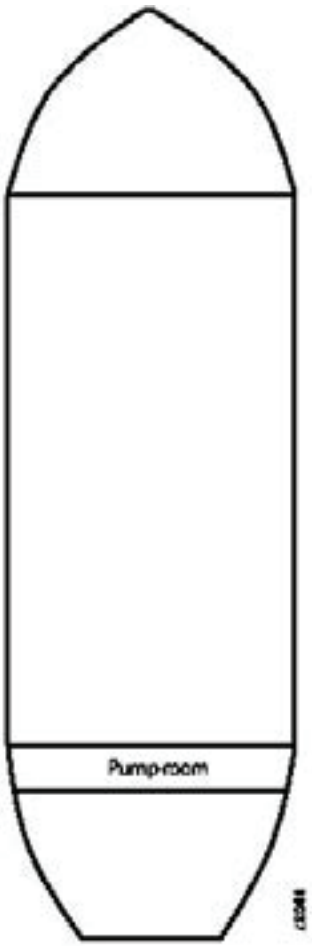
Gross tonnage……

Period from……..to……..

Name of ship……

Distinctive number or letters……

PLAN VIEW OF CARGO AND SLOP TANKS
(to be completed on board)



Identification of the tanks	Capacity

(Give the capacity of each tank in cubic metres)

INTRODUCTION

The following pages show a comprehensive list of items of cargo and ballast operations which are, when appropriate, to be recorded in the Cargo Record Book on a tank to tank basis in accordance with regulation 15.2 of Annex II of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78), as amended. The items have been grouped into operational sections, each of which is denoted by a letter.

When making entries in the Cargo 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 and, if applicable, by a surveyor authorized by the competent authority of the State in which the ship is unloading. Each completed page shall be countersigned by the master of the ship.

List of items to be recorded

Entries are required for operations involving all Categories of substances.

(A) Loading of cargo

1 Place of loading.

2 Identify tank(s), name of substance(s) and Category(ies).

(B) Internal transfer of cargo

3 Name and Category of cargo(es) transferred.

4 Identity of tanks:

.1 from :
.2 to :

5 Was (were) tank(s) in 4.1 emptied?

6 If not, quantity remaining in tank(s).

(C) Unloading of cargo

7 Place of unloading.

8 Identity of tank(s) unloaded.

9 Was (were) tank(s) emptied?

.1 If yes, confirm that the procedure for emptying and stripping has been performed in accordance with the ship's Procedures and Arrangements Manual (i.e. list, trim, stripping temperature).

.2 If not, quantity remaining in tank(s).

10 Does the ship's Procedures and Arrangements Manual require a prewash with subsequent disposal to reception facilities?

11 Failure of pumping and/or stripping system:

.1 time and nature of failure;

.2 reasons for failure;

.3 time when system has been made operational.

(D) Mandatory prewash in accordance with the ship's Procedures and Arrangements Manual

12 Identify tank(s), substance(s) and Category(ies).

13 Washing method:

.1 number of cleaning machines per tank;

.2 duration of wash/washing cycles;

.3 hot/cold wash.

14 Prewash slops transferred to:

.1 reception facility in unloading port (identify port)*;

.2 reception facility otherwise (identify port)*.

(E) Cleaning of cargo tanks except mandatory prewash (other prewash operations, final wash, ventilation etc.)

15 State time, identify tank(s), substance(s) and Category(ies) and state:

.1 washing procedure used;

.2 cleaning agent(s) (identify agent(s) and quantities);

.3 ventilation procedure used (state number of fans used, duration of ventilation).

16 Tank washings transferred:

.1 into the sea;

.2 to reception facility (identify port)*;

.3 to slops collecting tank (identify tank).

(F) Discharge into the sea of tank washings

17 Identify tank(s):

.1 Were tank washings discharged during cleaning of tank(s)? If so at what rate?

* Ship's masters should obtain from the operator of the reception facilities, which include barges and tank trucks, a receipt or certificate specifying the quantity of tank washings transferred, together with the time and date of the transfer. The receipt or certificate should be kept together with the cargo record book.

.2 Were tank washing(s) discharged from a slops collecting tank? If so, state quantity and rate of discharge.

18 Time pumping commenced and stopped.

19 Ship's speed during discharge.

(G) Ballasting of cargo tanks

20 Identity of tank(s) ballasted.

21 Time at start of ballasting.

(H) Discharge of ballast water from cargo tanks

22 Identity of tank(s).

23 Discharge of ballast:

.1 into the sea;

.2 to reception facilities (identify port) [*].

24 Time ballast discharge commenced and stopped.

25 Ship's speed during discharge.

(I) Accidental or other exceptional discharge

26 Time of occurrence.

27 Approximate quantity, substance(s) and Category(ies).

28 Circumstances of discharge or escape and general remarks.

(J) Control by authorized surveyors

29 Identify port.

30 Identify tank(s), substance(s), Category(ies) discharged ashore.

31 Have tank(s), pump(s), and piping system(s) been emptied?

32 Has a prewash in accordance with the ship's Procedures and Arrangements Manual been carried out?

33 Have tank washings resulting from the prewash been discharged ashore and is the tank empty?

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[*] Ship's masters should obtain from the operator of the reception facilities, which include barges and tank trucks, a receipt or certificate specifying the quantity of tank washings transferred, together with the time and date of the transfer. The receipt or certificate should be kept together with the cargo record book.

34 An exemption has been granted from mandatory prewash.

35 Reasons for exemption.

36 Name and signature of authorized surveyor.

37 Organization, company, government agency for which surveyor works.

(K) Additional operational procedures and remarks

Name of ship……..

Distinctive number or letters…….

IMO Number…….

CARGO/BALLAST OPERATIONS

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge/name of and signature of authorized surveyor

Signature of master……..

APPENDIX 3

FORM OF INTERNATIONAL POLLUTION PREVENTION CERTIFICATE FOR THE CARRIAGE OF NOXIOUS LIQUID SUBSTANCES IN BULK

INTERNATIONAL POLLUTION PREVENTION CERTIFICATE FOR THE CARRIAGE OF NOXIOUS LIQUID SUBSTANCES IN BULK

Issued under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, as amended (hereinafter referred to as "the Convention") under the authority of the Government of:

……
(full designation of the country)

by……
(full designation of the competent person or organization authorized under the provisions of the Convention)

Particulars of ship[*]

Name of ship ……

Distinctive number or letters…..……

IMO Number……

Port of registry……..

Gross tonnage……

[*] Alternatively, the particulars of the ship may be placed horizontally in boxes.

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with regulation 8 of Annex II of the Convention.

2 That the survey showed that the structure, equipment, systems, fitting, arrangements and material of the ship and the condition thereof are in all respects satisfactory and that the ship complies with the applicable requirements of Annex II of the Convention.

3 That the ship has been provided with a Procedures and Arrangements Manual as required by regulation 14 of Annex II of the Convention, and that the arrangements and equipment of the ship prescribed in the Manual are in all respects satisfactory

4 That the ship complies with the requirements of Annex II to MARPOL 73/78 for the carriage in bulk of the following Noxious Liquid Substances, provided that all relevant provisions of Annex II are observed.

Noxious Liquid Substances	Conditions of carriage (tank numbers etc.)	Pollution Category
Continued on additional signed and dated sheets		

This certificate is valid until ……..… subject to surveys in accordance with regulation 8 of Annex II of the Convention.

Completion date of the survey on which this certificate is based (dd/mm/yyyy): …….

Issued at……..
(Place of issue of certificate)

……. ……..……..……..…….
(Date of issue) (Signature of authorized official issuing the certificate)

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that, at a survey required by regulation 8 of Annex II of the Convention, the ship was found to comply with the relevant provisions of the Convention:

Annual survey:

Signed…….
(Signature of authorized official)
Place……
Date…dd/mm/yyyy……..…

(Seal or stamp of the authority, as appropriate)

Annual/Intermediate survey:

Signed…….
(Signature of authorized official)
Place……
Date…dd/mm/yyyy…….

(Seal or stamp of the authority, as appropriate)

Annual/Intermediate survey:

Signed…….
(Signature of authorized official)

Place……

Date…dd/mm/yyyy…….

(Seal or stamp of the authority, as appropriate)

Annual survey:

Signed…….
(Signature of authorized official)
Place……
Date…dd/mm/yyyy……

(Seal or stamp of the authority, as appropriate)

ANNUAL/INTERMEDIATE SURVEY IN ACCORDANCE WITH REGULATION 10.8.3

THIS IS TO CERTIFY that, at an annual/intermediate survey in accordance with regulation 10.8.3 of Annex II of the Convention, the ship was found to comply with the relevant provisions of the Convention:

Signed…….
(Signature of authorized official)
Place……
Date…dd/mm/yyyy…….

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE REGULATION 10.3 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 10.3 of Annex II of the Convention, be accepted as valid until

Signed…….
(Signature of authorized official)
Place……
Date…dd/mm/yyyy…….

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND REGULATION 10.4 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 10.4 of Annex II of the Convention, be accepted as valid until

Signed…….
(Signature of authorized official)
Place……
Date…dd/mm/yyyy…….

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE REGULATION 10.5 OR 10.6 APPLIES

This Certificate shall, in accordance with regulation 10.5 or 10.6 of Annex II of the Convention, be accepted as valid until …….

Signed……
(Signature of authorized official)
Place……
Date…dd/mm/yyyy…….

(Seal or stamp of the authority, as appropriate)

ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE REGULATION 10.8 APPLIES

In accordance with regulation 10.8 of Annex II of the Convention, the new anniversary date is ……

Signed…….
(Signature of authorized official)
Place……
Date…dd/mm/yyyy…….

(Seal or stamp of the authority, as appropriate)

In accordance with regulation 10.8 of Annex II of the Convention, the new anniversary date is ……

Signed…….
(Signature of authorized official)
Place……
Date…dd/mm/yyyy…….

(Seal or stamp of the authority, as appropriate)

APPENDIX 4

STANDARD FORMAT FOR THE PROCEDURES AND ARRANGEMENTS MANUAL

Note 1: The format consists of a standardized introduction and index of the leading paragraphs to each section. This standardized part shall be reproduced in the Manual of each ship. It shall be followed by the contents of each section as prepared for the particular ship. When a section is not applicable, "NA" shall be entered, so as not to lead to any disruption of the numbering as required by the standard format. Where the paragraphs of the standard format are printed in *italics*, the required information shall be described for that particular ship. The contents will vary from ship to ship because of design, trade and intended cargoes. Where the text is not in italics, that text of the standard format shall be copied into the Manual without any modification.

Note 2: If the Administration requires or accepts information and operational instructions in addition to those outlined in this Standard Format, they shall be included in Addendum D of the Manual.

STANDARD FORMAT

MARPOL 73/78 ANNEX II PROCEDURES AND ARRANGEMENTS MANUAL

Name of ship: ……

Distinctive number or letters: ……

IMO Number……..

Port of registry: ……..……....

Approval stamp of Administration:

INTRODUCTION

1 The International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (hereinafter referred to as MARPOL 73/78) was established in order to prevent the pollution of the marine environment by discharges into the sea from ships of harmful substances or effluents containing such substances. In order to achieve its aim, MARPOL 73/78 contains six Annexes in which detailed regulations are given with respect to the handling on board ships and the discharge into the sea or release into the atmosphere of six main groups of harmful substances, i.e. Annex I (Mineral oils), Annex II (Noxious Liquid Substances carried in bulk), Annex III (Harmful substances carried in packaged forms), Annex IV (Sewage), Annex V (Garbage) and Annex VI (Air Pollution).

2 Regulation 13 of Annex II of MARPOL 73/78 (hereinafter referred to as Annex II) prohibits the discharge into the sea of Noxious Liquid Substances of Categories X, Y or Z or of ballast water, tank washings or other residues or mixtures containing such substances, except in compliance with specified conditions including procedures and arrangements based upon standards developed by the International Maritime Organization (IMO) to ensure that the criteria specified for each Category will be met.

3 Annex II requires that each ship which is certified for the carriage of Noxious Liquid Substances in bulk shall be provided with a Procedures and Arrangements Manual, hereinafter referred to as the Manual.

4 This Manual has been written in accordance with Appendix 4 of Annex II and is concerned with the marine environmental aspects of the cleaning of cargo tanks and the discharge of residues and mixtures from these operations. The Manual is not a safety guide and reference shall be made to other publications specifically to evaluate safety hazards.

5 The purpose of the Manual is to identify the arrangements and equipment required to enable compliance with Annex II and to identify for the ship's officers all operational procedures with respect to cargo handling, tank cleaning, slops handling, residue discharging, ballasting and deballasting, which must be followed in order to comply with the requirements of Annex II.

6 In addition, this Manual, together with the ship's Cargo Record Book and the Certificate issued under Annex II[*], will be used by Administrations for control purposes in order to ensure full compliance with the requirements of Annex II by this ship.

7 The master shall ensure that no discharges into the sea of cargo residues or residue/water mixtures containing Category X, Y or Z substances shall take place, unless such discharges are made in full compliance with the operational procedures contained in this Manual.

8 This Manual has been approved by the Administration and no alteration or revision shall be made to any part of it without the prior approval of the Administration.

[*] Include only the Certificate issued to the particular ship: i.e. The International Pollution Prevention Certificate for the carriage of Noxious Liquid Substances in bulk or the Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk or the International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk.

INDEX OF SECTIONS

SECTION 1 Main features of MARPOL 73/78, Annex II

1.1 The requirements of Annex II apply to all ships carrying Noxious Liquid Substances in bulk. Substances posing a threat of harm to the marine environment are divided into three categories, X, Y and Z. Category X substances are those posing the greatest threat to the marine environment, whilst Category Z substances are those posing the smallest threat.

1.2 Annex II prohibits the discharge into the sea of any effluent containing substances falling under these categories, except when the discharge is made under conditions which are specified in detail for each Category. These conditions include, where applicable, such parameters as:

.1 the maximum quantity of substances per tank which may be discharged into the sea;

.2 the speed of the ship during the discharge;

.3 the minimum distance from the nearest land during discharge;

.4 the minimum depth of water at sea during discharge; and

.5 the need to effect the discharge below the waterline.

1.3 For certain sea areas identified as “special area” more stringent discharge criteria apply. Under Annex II the special area is the Antarctic area.

1.4 Annex II requires that every ship is provided with pumping and piping arrangements to ensure that each tank designated for the carriage of Category X, Y and Z substances does not retain after unloading a quantity of residue in excess of the quantity given in the Annex. For each tank intended for the carriage of such substances an assessment of the residue quantity has to be made. Only when the residue quantity as assessed is less than the quantity prescribed by the Annex a tank may be approved for the carriage of a Category X, Y or Z substances.

1.5 In addition to the conditions referred to above, an important requirement contained in Annex II is that the discharge operations of certain cargo residues and certain tank cleaning and ventilation operations may only be carried out in accordance with approved procedures and arrangements.

1.6 To enable the requirement of paragraph 1.5 to be met, this Manual contains in section 2 all particulars of the ship’s equipment and arrangements, in section 3 operational procedures for cargo unloading and tank stripping and in section 4 procedures for discharge of cargo residues, tank washing, slops collection, ballasting and deballasting as may be applicable to the substances the ship is certified to carry.

1.7 By following the procedures as set out in this Manual, it will be ensured that the ship complies with all relevant requirements of Annex II to MARPOL 73/78.

SECTION 2 Description of the ship's equipment and arrangements

2.1 This section contains all particulars of the ship's equipment and arrangements necessary to enable the crew to follow the operational procedures set out in sections 3 and 4.

2.2 **General arrangement of ship and description of cargo tanks**

This section shall contain a brief description of the cargo area of the ship with the main features of the cargo tanks and their positions.

Line or schematic drawings showing the general arrangement of the ship and indicating the position and numbering of the cargo tanks and heating arrangements shall be included.

2.3 **Description of cargo pumping and piping arrangements and stripping system**

This section shall contain a description of the cargo pumping and piping arrangements and of the stripping system. Line or schematic drawings shall be provided showing the following and be supported by textual explanation where necessary:

.1 cargo piping arrangements with diameters;

.2 cargo pumping arrangements with pump capacities;

.3 piping arrangements of stripping system with diameters;

.4 pumping arrangements of stripping system with pump capacities;

.5 location of suction points of cargo lines and stripping lines inside every cargo tank;

.6 if a suction well is fitted, the location and cubic capacity thereof;

.7 line draining and stripping or blowing arrangements; and

.8 quantity and pressure of nitrogen or air required for line blowing if applicable.

2.4 **Description of ballast tanks and ballast pumping and piping arrangements**

This section shall contain a description of the ballast tanks and ballast pumping and piping arrangements.

Line or schematic drawings and tables shall be provided showing the following:

.1 a general arrangement showing the segregated ballast tanks and cargo tanks to be used as ballast tanks together with their capacities (cubic metres);

.2 ballast piping arrangement;

.3 pumping capacity for those cargo tanks which may also be used as ballast tanks; and

.4 any interconnection between the ballast piping arrangements and the underwater outlet system.

2.5 **Description of dedicated slop tanks with associated pumping and piping arrangements**

This section shall contain a description of the dedicated slop tank(s), if any, with the associated pumping and piping arrangements. Line or schematic drawings shall be provided showing the following:

.1 which dedicated slop tanks are provided together with the capacities of such tanks;

.2 pumping and piping arrangements of dedicated slop tanks with piping diameters and their connection with the underwater discharge outlet.

2.6 **Description of underwater discharge outlet for effluents containing Noxious Liquid Substances**

This section shall contain information on position and maximum flow capacity of the underwater discharge outlet (or outlets) and the connections to this outlet from the cargo tanks and slop tanks. Line or schematic drawings shall be provided showing the following:

.1 location and number of underwater discharge outlets;

.2 connections to underwater discharge outlet;

.3 location of all seawater intakes in relation to underwater discharge outlets.

2.7 **Description of flow rate indicating and recording devices**

Deleted

2.8 **Description of cargo tank ventilation system**

This section shall contain a description of the cargo tank ventilation system.

Line or schematic drawings and tables shall be provided showing the following and supported by textual explanation if necessary:

.1 the Noxious Liquid Substances the ship is certified fit to carry having a vapour pressure over 5 kPa at 20°C suitable for cleaning by ventilation to be listed in paragraph 4.4.10 of the Manual;

.2 ventilation piping and fans;

.3 position of the ventilation openings;

.4 the minimum flow rate of the ventilation system to adequately ventilate the bottom and all parts of the cargo tank;

.5 the location of structures inside the tank affecting ventilation;

.6 the method of ventilating the cargo pipeline system, pumps, filters, etc; and

.7 means for ensuring that the tank is dry.

2.9 **Description of tank washing arrangements and wash water heating system**

This section shall contain a description of the cargo tank washing arrangements, wash water heating system and all necessary tank washing equipment.

Line or schematic drawings and tables or charts showing the following:

.1 arrangements of piping dedicated for tank washing with pipeline diameters;

.2 type of tank cleaning machines with capacities and pressure rating;

.3 maximum number of tank cleaning machines which can operate simultaneously;

.4 position of deck openings for cargo tank washing;

.5 the number of cleaning machines and their location required for ensuring complete coverage of the cargo tank walls;

.6 maximum capacity of wash water which can be heated to 60°C by the installed heating equipment; and

.7 maximum number of tank cleaning machines which can be operated simultaneously at 60°C.

SECTION 3 Cargo unloading procedures and tank stripping

3.1 This section contains operational procedures in respect of cargo unloading and tank stripping which must be followed in order to ensure compliance with the requirements of Annex II.

3.2 **Cargo unloading**

This section shall contain procedures to be followed including the pump and cargo unloading and suction line to be used for each tank. Alternative methods may be given.

The method of operation of the pump or pumps and the sequence of operation of all valves shall be given.

The basic requirement is to unload the cargo to the maximum extent.

3.3 **Cargo tank stripping**

This section shall contain procedures to be followed during the stripping of each cargo tank.

The procedures shall include the following:

.1 operation of stripping system;
.2 list and trim requirements;
.3 line draining and stripping or blowing arrangements if applicable; and
.4 duration of the stripping time of the water test.

3.4 **Cargo temperature**

This section shall contain information on the heating requirements of cargoes which have been identified as being required to be at a certain minimum temperature during unloading.

Information shall be given on control of the heating system and the method of temperature measurement.

3.5 **Procedures to be followed when a cargo tank cannot be unloaded in accordance with the required procedures**

This section shall contain information on the procedures to be followed in the event that the requirements contained in sections 3.3 and/or 3.4 cannot be met due to circumstances such as the following:

.1 failure of cargo tank stripping system; and

.2 failure of cargo tank heating system.

3.6 **Cargo Record Book**

The Cargo Record Book shall be completed in the appropriate places on completion of any cargo operation.

SECTION 4 Procedures relating to the cleaning of cargo tanks, the discharge of residues, ballasting and deballasting

4.1 This section contains operational procedures in respect of tank cleaning, ballast and slops handling which must be followed in order to ensure compliance with the requirements of Annex II.

4.2 The following paragraphs outline the sequence of actions to be taken and contain the information essential to ensure that Noxious Liquid Substances are discharged without posing a threat of harm to the marine environment.

4.3 Deleted

4.4 The information necessary to establish the procedures for discharging the residue of the cargo, cleaning, ballasting and deballasting the tank, shall take into account the following:

.1 Category of substance

The Category of the substance should be obtained from the relevant Certificate.

.2 Stripping efficiency of tank pumping system

The contents of this section will depend on the design of the ship and whether it is a new ship or existing ship (See flow diagram and pumping/stripping requirements).

.3 Vessel within or outside Special Area

This section shall contain instructions on whether the tank washings can be discharged into the sea within a special area (as defined in section 1.3) or outside a special area. The different requirements shall be made clear and will depend on the design and trade of the ship.

No discharges into the sea of residues of Noxious Liquid Substances, or mixtures containing such substances, are allowed within the Antarctic area (the sea area south of latitude 60°S).

.4 Solidifying or High-Viscosity Substance

The properties of the substance should be obtained from the shipping document.

.5 Miscibility with water

Deleted

.6 Compatibility with slops containing other substances

This section shall contain instructions on the permissible and non-permissible mixing of cargo slops. Reference should be made to compatibility guides.

.7 Discharge to reception facility

This section shall identify those substances the residues of which are required to be prewashed and discharged to a reception facility.

.8 Discharging into the sea

This section shall contain information on the factors to be considered in order to identify whether the residue/water mixtures are permitted to be discharged into the sea.

.9 Use of cleaning agents or additives

This section shall contain information on the use and disposal of cleaning agents (e.g. solvents used for tank cleaning) and additives[*] to tank washing water (e.g. detergents).

.10 Use of ventilation procedures for tank cleaning

This section shall make reference to all substances suitable for the use of ventilation procedures.

4.5 Having assessed the above information, the correct operational procedures to be followed should be identified using the instructions and flow diagram of section 5. Appropriate entries shall be made in the Cargo Record Book indicating the procedure adopted.

SECTION 5 Information and procedures

This section shall contain procedures, which will depend on the age of the ship and pumping efficiency. Examples of flow diagram referred to in this section are given at addendum A and incorporate comprehensive requirements applicable to both new and existing ships. The Manual for a particular ship shall only contain those requirements specifically applicable to that ship.

Information relating to melting point and viscosity, for those substances which have a melting point equal to or greater than 0°C or a viscosity equal or greater than 50 mPa.s at 20°C, shall be obtained from the shipping document.

For substances allowed to be carried, reference is made to the relevant Certificate.

The Manual shall contain:

Table 1	:	Deleted
Table 2	:	Cargo tank information.
Addendum A	:	Flow diagram.
Addendum B	:	Prewash procedures.
Addendum C	:	Ventilation procedures.
Addendum D	:	Additional information and operational instructions when required or accepted by the Administration.

Outlines of the above table and addenda are shown below.

[*] See the latest edition of MEPC.2 circular (issued annually in December).

Table 2 - Cargo tank information

Tank no.	Capacity (m^3)	Stripping quantity (litres)

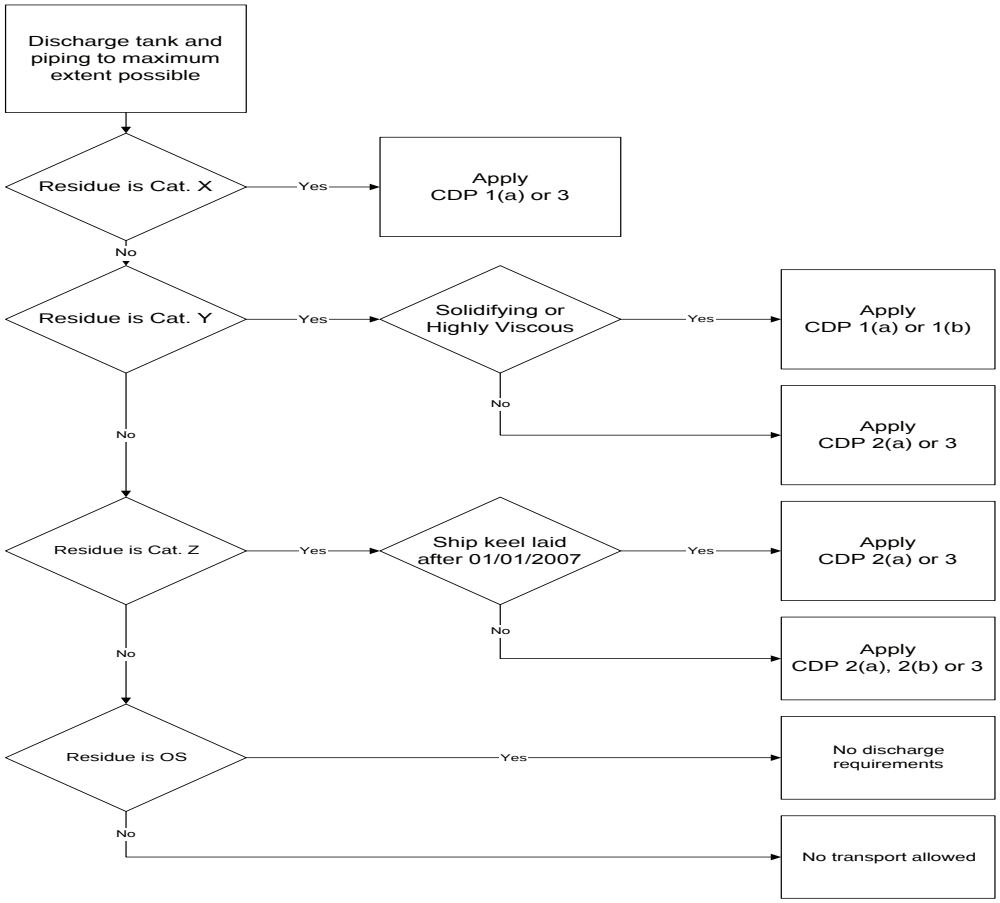
ADDENDUM A

FLOW DIAGRAMS -- CLEANING OF CARGO TANKS AND DISPOSAL OF TANK WASHINGS/BALLAST CONTAINING RESIDUES OF CATEGORY X,Y, AND Z SUBSTANCES

Note 1 : This flow diagram shows the basic requirements applicable to all age groups of ships and is for guidance only.

Note 2 : All discharges into the sea are regulated by Annex II.

Note 3 : Within the Antarctic area, any discharge into the sea of Noxious Liquid Substances or mixtures containing such substances is prohibited.



Ship details	**Stripping requirements (in litres)**		
	Category X	**Category Y**	**Category Z**
New Ships: keel laid after 01/01/2007	75	75	75
IBC ships until 01/01/2007	100 +50 tolerance	100 + 50 tolerance	300 + 50 tolerance
BCH ships	300 + 50 tolerance	300 + 50 tolerance	900 + 50 tolerance
Other ships: keel-laid before 01/01/2007	N/A	N/A	Empty to the most possible extent

Cleaning and disposal procedures (CDP) (Start at the top of the column under the CDP number specified and complete each item procedure in the sequence where marked)						
No.	**Operation**	**Procedure Number**				
		1(a)	1(b)	2(a)	2(b)	3
1	Strip tank and piping to maximum extent, at least in compliance with the procedures in section 3 of this Manual	X	X	X	X	X
2	Apply prewash in accordance with Addendum B of this Manual and discharge residue to reception facility	X	X			
3	Apply subsequent wash, additional to the prewash, with: a complete cycle of the cleaning machine(s) *for ships built before 1 July 1994* a water quantity not less than calculated with "k"=1.0 *for ships built on or after 1 July 1994*		X			
4	Apply ventilation procedure in accordance with Addendum C of this Manual					X
5	Ballast tanks or wash tank to commercial standards	X		X	X	X
6	Ballast added to tank		X			
7	Conditions for discharge of ballast/residue/water mixtures other than prewash:					
	.1 distance from land > 12 nautical miles	X		X	X	
	.2 ship's speed > 7 knots	X		X	X	
	.3 water depth > 25 metres	X		X	X	
	.4 Using underwater discharge (not exceeding permissible discharge rate)	X		X		
8	Conditions for discharge of ballast:					
	.1 distance from land > 12 nautical miles		X			
	.2 water depth > 25 metres		X			
9	Any water subsequently introduced into a tank may be discharged into the sea without restrictions	X	X	X	X	X

ADDENDUM B

PREWASH PROCEDURES

This addendum to the Manual shall contain prewash procedures based on appendix 6 of Annex II. These procedures shall contain specific requirements for the use of the tank washing arrangements and equipment provided on the particular ship and include the following:

.1 cleaning machine positions to be used;

.2 slops pumping out procedure;

.3 requirements for hot washing;

.4 number of cycles of cleaning machine (or time); and

.5 minimum operating pressures.

ADDENDUM C

VENTILATION PROCEDURES

This addendum to the Manual shall contain ventilation procedures based on appendix 7 of Annex II. The procedures shall contain specific requirements for the use of the cargo tank ventilation system, or equipment, fitted on the particular ship and shall include the following:

.1 ventilation positions to be used;

.2 minimum flow or speed of fans;

.3 procedures for ventilating cargo pipeline, pumps, filters, etc.; and

.4 procedures for ensuring that tanks are dry on completion.

ADDENDUM D - ADDITIONAL INFORMATION AND OPERATIONAL INSTRUCTIONS REQUIRED OR ACCEPTED BY THE ADMINISTRATION

APPENDIX 5

ASSESSMENT OF RESIDUE QUANTITIES IN CARGO TANKS, PUMPS AND ASSOCIATED PIPING

1 Introduction

1.1 Purpose

1.1.1 The purpose of this appendix is to provide the procedure for testing the efficiency of cargo pumping systems.

1.2 Background

1.2.1 The ability of the pumping system of a tank to comply with regulation 12.1, 12.2 or 12.3 is determined by performing a test in accordance with the procedure set out in section 3 of this appendix. The quantity measured is termed the “stripping quantity”. The stripping quantity of each tank shall be recorded in the ship’s Manual.

1.2.2 After having determined the stripping quantity of one tank, the Administration may use the determined quantities for a similar tank, provided the Administration is satisfied that the pumping system in that tank is similar and operating properly.

2 Design criteria and performance test

2.1 The cargo pumping systems should be designed to meet the required maximum amount of residue per tank and associated piping as specified in regulation 12 of Annex II to the satisfaction of the Administration.

2.2 In accordance with regulation 12.5 the cargo pumping systems shall be tested with water to prove their performance. Such water tests shall, by measurement, show that the system meets the requirements of regulation 12. In respect of regulations 12.1 and 12.2 a tolerance of 50 litres per tank is acceptable.

3 Water performance test

3.1 Test condition

3.1.1 The ship’s trim and list shall be such as to provide favourable drainage to the suction point. During the water test the ship’s trim shall not exceed 3° by the stern, and the ship’s list shall not exceed 1°.

3.1.2 The trim and list chosen for the water test shall be recorded. This shall be the minimum favourable trim and list used during the water test.

3.1.3 During the water test means shall be provided to maintain a back-pressure of not less than 100 kPa at the cargo tank’s unloading manifold (see figures 5-1 and 5-2).

3.1.4 The time taken to complete the water test shall be recorded for each tank, recognizing that this may need to be amended as a result of subsequent tests.

3.2 Test procedure

3.2.1 Ensure that the cargo tank to be tested and its associated piping have been cleaned and that the cargo tank is safe for entry.

3.2.2 Fill the cargo tank with water to a depth necessary to carry out normal end of unloading procedures.

3.2.3 Discharge and strip water from the cargo tank and its associated piping in accordance with the proposed procedures.

3.2.4 Collect all water remaining in the cargo tank and its associated piping into a calibrated container for measurement. Water residues shall be collected, *inter alia*, from the following points:

.1 the cargo tank suction and its vicinity;

.2 any entrapped areas on the cargo tank bottom;

.3 the low point drain of the cargo pump; and

.4 all low point drains of piping associated with the cargo tank up to the manifold valve.

3.2.5 The total water volumes collected above determine the stripping quantity for the cargo tank.

3.2.6 Where a group of tanks is served by a common pump or piping, the water test residues associated with the common system(s) may be apportioned equally among the tanks provided that the following operational restriction is included in the ship’s approved Manual: “For sequential unloading of tanks in this group, the pump or piping is not to be washed until all tanks in the group have been unloaded.”

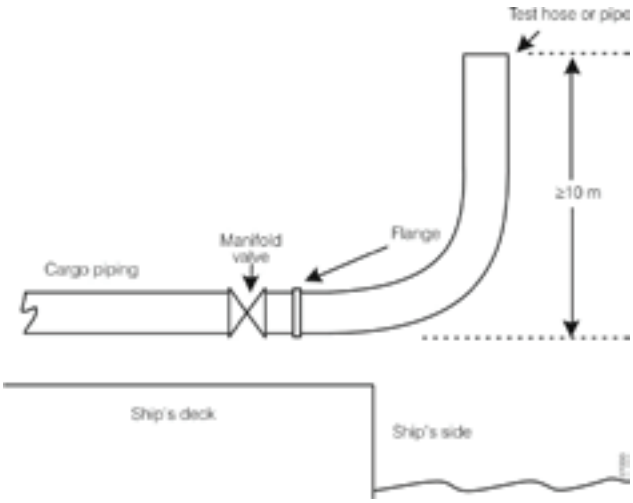


Figure 5-1

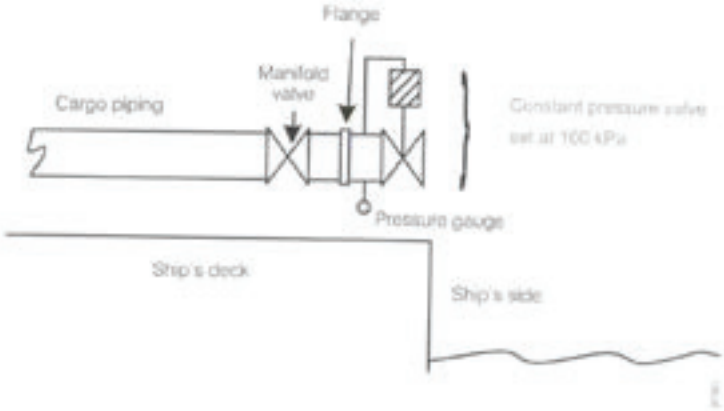


Figure 5-2

The above figures illustrate test arrangements that would provide a backpressure of not less than 100 kPa at the cargo tank's unloading manifold.

APPENDIX 6

PREWASH PROCEDURES

A For ships built before 1 July 1994

A prewash procedure is required in order to meet certain Annex II requirements. This appendix explains how these prewash procedures shall be performed.

Prewash procedures for non-Solidifying Substances

1 Tanks shall be washed by means of a rotary water jet, operated at sufficiently high water pressure. In the case of Category X substances cleaning machines shall be operated in such locations that all tank surfaces are washed. In the case of Category Y substances only one location need be used.

2 During washing the amount of water in the tank shall be minimized by continuously pumping out slops and promoting flow to the suction point (positive list and trim). If this condition cannot be met the washing procedure shall be repeated three times, with thorough stripping of the tank between washings.

3 Those substances which have a viscosity equal to or greater than 50 mPa.s at 20°C shall be washed with hot water (temperature at least 60°C), unless the properties of such substances make the washing less effective.

4 The number of cycles of the cleaning machine used shall not be less than that specified in table 6-1. A cleaning machine cycle is defined as the period between two consecutive identical orientations of the tank cleaning machine (rotation through 360°).

5 After washing, the tank cleaning machine(s) shall be kept operating long enough to flush the pipeline, pump and filter, and discharge to shore reception facilities shall be continued until the tank is empty.

Prewash procedures for Solidifying Substances

1 Tanks shall be washed as soon as possible after unloading. If possible tanks shall be heated prior to washing.

2 Residues in hatches and manholes shall preferably be removed prior to the prewash.

3 Tanks shall be washed by means of a rotary water jet operated at sufficiently high water pressure and in locations to ensure that all tank surfaces are washed.

4 During washing the amount of water in the tank shall be minimized by pumping out slops continuously and promoting flow to the suction point (positive list and trim). If this condition cannot be met, the washing procedure shall be repeated three times with thorough stripping of the tank between washings.

5 Tanks shall be washed with hot water (temperature at least 60°C) unless the properties of such substances make the washing less effective.

6 The number of cycles of the cleaning machine used shall not be less than that specified in table 6-1. A cleaning machine cycle is defined as the period between two consecutive identical orientations of the machine (rotation through 360°).

7 After washing, the cleaning machine(s) shall be kept operating long enough to flush the pipeline, pump and filter,and discharge to shore reception facilities shall be continues until the tank is empty.

Table 6-1 -- Number of cleaning machine cycles to be used in each location

Category of substance	Number of cleaning machine cycles	
	Non-Solidifying Substances	Solidifying Substances
Category X	1	2
Category Y	1/2	1

B For ships built on or after 1 July 1994 and recommendatory for ships built before 1 July 1994

A prewash procedure is required in order to meet certain Annex II requirements. This appendix explains how these prewash procedures shall be performed and how the minimum volumes of washing media to be used shall be determined. Smaller volumes of washing media may be used based on actual verification testing to the satisfaction of the Administration. Where reduced volumes are approved an entry to that effect must be recorded in the Manual.

If a medium other than water is used for the prewash, the provisions regulation 13.5.1 apply.

Prewash procedures for non-Solidifying Substances without recycling

1 Tanks shall be washed by means of a rotary jet(s), operated at sufficiently high water pressure. In the case of Category X substances cleaning machines shall be operated in such locations that all tank surfaces are washed. In the case of Category Y substances only one location need be used.

2 During washing the amount of liquid in the tank shall be minimized by continuously pumping out slops and promoting flow to the suction point. If this condition cannot be met, the washing procedure shall be repeated three times, with thorough stripping of the tank between washings.

3 Those substances which have a viscosity equal to or greater than 50 mPa.s at 20°C shall be washed with hot water (temperature at least 60°C), unless the properties of such substances make the washing less effective.

4 The quantities of wash water used shall not be less than those specified in paragraph 20 or determined according to paragraph 21.

5 After prewashing the tanks and lines shall be thoroughly stripped.

Prewash procedures for Solidifying Substances without recycling

6 Tanks shall be washed as soon as possible after unloading. If possible, tanks should be heated prior to washing.

7 Residues in hatches and manholes should preferably be removed prior to the prewash.

8 Tanks shall be washed by means of a rotary jet(s) operated at sufficiently high water pressure and in locations to ensure that all tank surfaces are washed.

9 During washing the amount of liquid in the tank shall be minimized by pumping out slops continuously and promoting flow to the suction point. If this condition cannot be met, the washing procedure shall be repeated three times with thorough stripping of the tank between washings.

10 Tanks shall be washed with hot water (temperature at least 60°C), unless the properties of such substances make the washing less effective.

11 The quantities of wash water used shall not be less than those specified in paragraph 20 or determined according to paragraph 21.

12 After prewashing the tanks and lines shall be thoroughly stripped.

Prewash procedures with recycling of washing medium

13 Washing with a recycled washing medium may be adopted for the purpose of washing more than one cargo tank. In determining the quantity, due regard must be given to the expected amount of residues in the tanks and the properties of the washing medium and whether any initial rinse or flushing is employed. Unless sufficient data are provided, the calculated end concentration of cargo residues in the washing medium shall not exceed 5% based on nominal stripping quantities.

14 The recycled washing medium shall only be used for washing tanks having contained the same or similar substance.

15 A quantity of washing medium sufficient to allow continuous washing shall be added to the tank or tanks to be washed.

16 All tank surfaces shall be washed by means of a rotary jet(s) operated at sufficiently high pressure. The recycling of the washing medium may either be within the tank to be washed or via another tank, e.g. a slop tank.

17 The washing shall be continued until the accumulated throughput is not less than that corresponding to the relevant quantities given in paragraph 20 or determined according to paragraph 21.

18 Solidifying Substances and substances with viscosity equal to or greater than 50 mPa.s at 20°C shall be washed with hot water (temperature at least 60°C) when water is used as the washing medium, unless the properties of such substances make the washing less effective.

19 After completing the tank washing with recycling to the extent specified in paragraph 17, the washing medium shall be discharged and the tank thoroughly stripped. Thereafter, the tank shall be subjected to a rinse, using clean washing medium, with continuous drainage and discharged to a reception facility. The rinse shall as a minimum cover the tank bottom and be sufficient to flush the pipelines, pump and filter.

Minimum quantity of water to be used in a prewash

20 The minimum quantity of water to be used in a prewash is determined by the residual quantity of noxious liquid substance in the tank, the tank size, the cargo properties, the permitted concentration in any subsequent wash water effluent, and the area of operation. The minimum quantity is given by the following formula:

$$Q=k(15r^{0.8} + 5r^{0.7} \times V/1000)$$

where

Q = the required minimum quantity in m^3

r = the residual quantity per tank in m^3. The value of r shall be the value demonstrated in the actual stripping efficiency test, but shall not be taken lower than 0.100 m^3 for a tank volume of 500 m^3 and above and 0.040 m^3 for a tank volume of 100 m^3 and below. For tank sizes between 100 m^3 and 500 m^3 the minimum value of r allowed to be used in the calculations is obtained by linear interpolation.

For Category X substances the value of r shall either be determined based on stripping tests according to the Manual, observing the lower limits as given above, or be taken to be 0.9 m^3.

V = tank volume in m^3

k = a factor having values as follows:

Category X, non-Solidifying, Low-Viscosity Substance,	k = 1.2
Category X, Solidifying or High-Viscosity Substance,	k = 2.4
Category Y, non-Solidifying, Low-Viscosity Substance	k = 0.5
Category Y, Solidifying or High-Viscosity Substance	k = 1.0

The table below is calculated using the formula with a k factor of 1 and may be used as an easy reference.

Stripping quantity (m^3)	**Tank volume (m^3)**		
	100	**500**	**3000**
≤0.04	1.2	2.9	5.4
.10	2.5	2.9	5.4
.30	5.9	6.8	12.2
.90	14.3	16.1	27.7

21 Verification testing for approval of prewash volumes lower than those given in paragraph 20 may be carried out to the satisfaction of the Administration to prove that the requirements of regulation 13 are met, taking into account the substances the ship is certified to carry. The prewash volume so verified shall be adjusted for other prewash conditions by application of the factor k as defined in paragraph 20.

APPENDIX 7

VENTILATION PROCEDURES

1 Cargo residues of substances with a vapour pressure greater than 5 KPa at 20°C may be removed from a cargo tank by ventilation.

2 Before residues of Noxious Liquid Substances are ventilated from a tank the safety hazards relating to cargo flammability and toxicity shall be considered. With regard to safety aspects, the operational requirements for openings in cargo tanks in SOLAS 74, as amended, the International Bulk Chemical Code, the Bulk Chemical Code, and the ventilation procedures in the International Chamber of Shipping (ICS) Tanker Safety Guide (Chemicals) should be consulted.

3 Port authorities may also have regulations on cargo tank ventilation.

4 The procedures for ventilation of cargo residues from a tank are as follows:

.1 the pipelines shall be drained and further cleared of liquid by means of ventilation equipment;

.2 the list and trim shall be adjusted to the minimum levels possible so that evaporation of residues in the tank is enhanced;

.3 ventilation equipment producing an airjet which can reach the tank bottom shall be used. Figure 7-1 could be used to evaluate the adequacy of ventilation equipment used for ventilating a tank of a given depth;

.4 ventilation equipment shall be placed in the tank opening closest to the tank sump or suction point;

.5 ventilation equipment shall, when practicable, be positioned so that the airjet is directed at the tank sump or suction point and impingement of the airjet on tank structural members is to be avoided as much as possible; and

.6 ventilation shall continue until no visible remains of liquid can be observed in the tank. This shall be verified by a visual examination or an equivalent method.

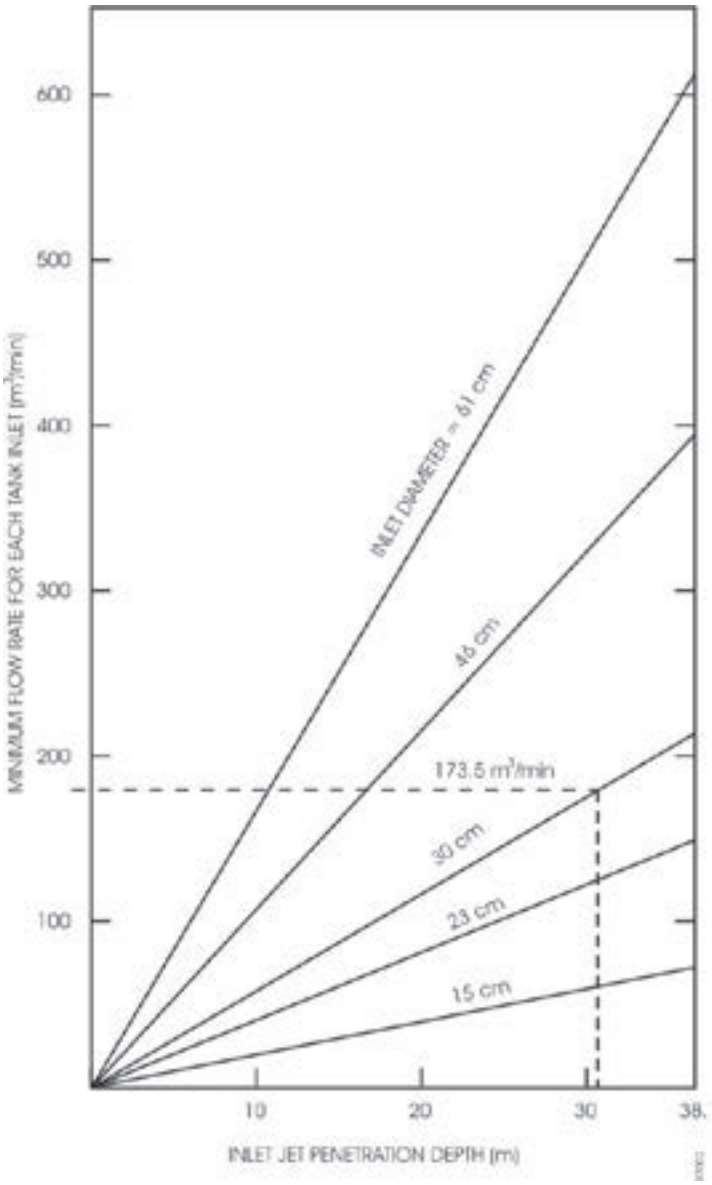


Figure 7-1. Minimum flow rate as a function of jet penetration depth. Jet penetration depth shall be compared against tank height.

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ANNEX 1

RESOLUTION MEPC.270(69)
(Adopted on 22 April 2016)

AMENDMENTS TO THE ANNEX OF THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO

Amendments to MARPOL Annex II

(Revised GESAMP Hazard Evaluation Procedure)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), which specifies the amendment procedure and confers upon the appropriate body of the Organization the function of considering and adopting amendments thereto,

HAVING CONSIDERED, at its sixty-ninth session, proposed amendments to Appendix I of MARPOL Annex II concerning the abbreviated legend to the revised GESAMP Hazard Evaluation Procedure,

1 ADOPTS, in accordance with article 16(2)(d) of MARPOL, amendments to Appendix I of MARPOL Annex II, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of MARPOL, that the amendments shall be deemed to have been accepted on 1 March 2017 unless prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of MARPOL, the said amendments shall enter into force on 1 September 2017 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, for the purposes of article 16(2)(e) of MARPOL, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Parties to MARPOL;

5 REQUESTS FURTHER the Secretary-General to transmit copies of the present resolution and its annex to Members of the Organization which are not Parties to MARPOL.

ANNEX

AMENDMENTS TO MARPOL ANNEX II
(Revised GESAMP Hazard Evaluation Procedure)

ANNEX II

REGULATIONS FOR THE CONTROL OF POLLUTION BY NOXIOUS LIQUID SUBSTANCES IN BULK

Appendix I

Guidelines for the categorization of noxious liquid substances

The tables under the title "Abbreviated legend to the revised GESAMP Hazard Evaluation Procedure" are replaced with the following:

The Revised GESAMP hazard evaluation procedure

Columns A & B Aquatic environment					
	A **Bioaccumulation and biodegradation**			**B** **Aquatic toxicity**	
	A 1		**A 2**	**B 1**	**B 2**
rating	Bioaccumulation		Biodegradation	Acute toxicity	Chronic toxicity
	log Pow	BCF		LC/EC/IC50 (mg/l)	NOEC (mg/l)
0	<1 or > ca.7	no measurable BCF	**R:** readily biodegradable	>1000	>1
1	≥1 - <2	≥1 - <10	**NR:** not readily biodegradable	>100 - ≤1000	>0.1 - ≤1
2	≥2 - <3	≥10 - <100		>10 - ≤100	>0.01 - ≤0.1
3	≥3 - <4	≥100 - <500		>1 - ≤10	>0.001 - ≤0.01
4	≥4 - <5	≥500 - <4000		>0.1 - ≤1	≤0.001
5	≥5 - < ca.7	>4000		>0.01 - ≤0.1	
6				≤0.01	

Columns C & D Human health (toxic effects to mammals)						
	C Acute mammalian toxicity			D Irritation, corrosion and long-term health effects		
rating	C1 Oral toxicity LD_{50}/ATE (mg/kg)	C2 Dermal toxicity LD_{50}/ATE (mg/kg)	C3 Inhalation toxicity LC_{50}/ATE (mg/l)	D1 Skin irritation & corrosion	D2 Eye irritation & corrosion	D3 Long-term health effects
0	>2000	>2000	>20	not irritating	not irritating	**C** - Carcinogenic
1	>300 - ≤2000	>1000 - ≤2000	>10 - ≤20	mildly irritating	mildly irritating	**M** - Mutagenic
2	>50 - ≤300	>200 - ≤1000	>2 - ≤10	irritating	irritating	**R** - Reprotoxic
3	>5 - ≤50	>50 - ≤200	>0.5 - ≤2	severely irritating or corrosive **3A** Corr. (≤4hr) **3B** Corr. (≤1hr) **3C** Corr. (≤3min)	severely irritating	**Ss** - Sensitising to skin **Sr** - Sensitising to respiratory system **A** - Aspiration hazard **T** - Target Organ Toxicity **N** - Neurotoxic **I** - Immunotoxic
4	≤5	≤50	≤0.5			

Column E Interference with other uses of the sea			
E1 Tainting	**E2** Physical effects on wildlife & benthic habitats	**Numerical rating**	**E3** Interference with Coastal Amenities
NT: not tainting (tested) **T**: tainting test positive	**Fp**: Persistent Floater **F**: Floater **S**: Sinking Substances	**0**	no interference ***no warning***
		1	slightly objectionable ***warning, no closure of amenity***
		2	moderately objectionable ***possible closure of amenity***
		3	highly objectionable ***closure of amenity***

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ANNEX 9

RESOLUTION MEPC.193(61)

Adopted on 1 October 2010

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Revised MARPOL Annex III)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED draft amendments to Annex III of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Annex III of MARPOL 73/78, the text of which is set out at annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2013 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2014 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the Annex;

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its Annex.

ANNEX

AMENDMENTS TO MARPOL ANNEX III

The existing text of MARPOL Annex III, as adopted by resolution MEPC.156(55), is replaced by the following:

REGULATIONS FOR THE PREVENTION OF POLLUTION BY HARMFUL SUBSTANCES CARRIED BY SEA IN PACKAGED FORM

Regulation 1
Application

1 Unless expressly provided otherwise, the regulations of this Annex apply to all ships carrying harmful substances in packaged form.

.1 For the purpose of this Annex, "harmful substances" are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code)* or which meet the criteria in the Appendix of this Annex.

.2 For the purposes of this Annex, "packaged form" is defined as the forms of containment specified for harmful substances in the IMDG Code.

2 The carriage of harmful substances is prohibited, except in accordance with the provisions of this Annex.

3 To supplement the provisions of this Annex, the Government of each Party to the Convention shall issue, or cause to be issued, detailed requirements on packing, marking, labelling, documentation, stowage, quantity limitations and exceptions for preventing or minimizing pollution of the marine environment by harmful substances.*

4 For the purposes of this Annex, empty packagings which have been used previously for the carriage of harmful substances shall themselves be treated as harmful substances unless adequate precautions have been taken to ensure that they contain no residue that is harmful to the marine environment.

5 The requirements of this Annex do not apply to ship's stores and equipment.

* Refer to the IMDG Code adopted by the Organization by resolution MSC.122(75), as amended by the Maritime Safety Committee.

Regulation 2
Packing

Packages shall be adequate to minimize the hazard to the marine environment, having regard to their specific contents.

Regulation 3
Marking and labelling

1 Packages containing a harmful substance shall be durably marked or labelled to indicate that the substance is a harmful substance in accordance with the relevant provisions of the IMDG Code.

2 The method of affixing marks or labels on packages containing a harmful substance shall be in accordance with the relevant provisions of the IMDG Code.

Regulation 4[*]
Documentation

1 Transport information relating to the carriage of harmful substances shall be in accordance with the relevant provisions of the IMDG Code and shall be made available to the person or organization designated by the port State authority.

2 Each ship carrying harmful substances shall have a special list, manifest or stowage plan setting forth, in accordance with the relevant provisions of the IMDG Code, the harmful substances on board and the location thereof. A copy of one of these documents shall be made available before departure to the person or organization designated by the port State authority.

Regulation 5
Stowage

Harmful substances shall be properly stowed and secured so as to minimize the hazards to the marine environment without impairing the safety of the ship and persons on board.

Regulation 6
Quantity limitations

Certain harmful substances may, for sound scientific and technical reasons, need to be prohibited for carriage or be limited as to the quantity which may be carried aboard any one ship. In limiting the quantity, due consideration shall be given to size, construction and equipment of the ship, as well as the packaging and the inherent nature of the substances.

[*] Reference to "documents" in this regulation does not preclude the use of electronic data processing (EDP) and electronic data interchange (EDI) transmission techniques as an aid to paper documentation.

Regulation 7
Exceptions

1 Jettisoning of harmful substances carried in packaged form shall be prohibited, except where necessary for the purpose of securing the safety of the ship or saving life at sea.

2 Subject to the provisions of the present Convention, appropriate measures based on the physical, chemical and biological properties of harmful substances shall be taken to regulate the washing of leakages overboard, provided that compliance with such measures would not impair the safety of the ship and persons on board.

Regulation 8
Port State control on operational requirements[*]

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.

2 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 harmful substances, the Party shall take such steps, including carrying out detailed inspection and, if required, 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.

[*] Refer to the Procedures for port State control adopted by the Organization by resolution A.787(19) and amended by resolution A.882(21).

APPENDIX TO ANNEX III

Criteria for the identification of harmful substances in packaged form

For the purposes of this Annex, substances identified by any one of the following criteria are harmful substances*:

(a) Acute (short-term) aquatic hazard

Category: Acute 1	
96 hr LC_{50} (for fish)	≤ 1 mg/l and/or
48 hr EC_{50} (for crustacea)	≤ 1 mg/l and/or
72 or 96 hr ErC_{50} (for algae or other aquatic plants)	≤ 1 mg/l

(b) Long-term aquatic hazard

(i) Non-rapidly degradable substances for which there are adequate chronic toxicity data available

Category Chronic 1:	
Chronic NOEC or EC_x (for fish)	≤ 0.1 mg/l and/or
Chronic NOEC or EC_x (for crustacea)	≤ 0.1 mg/l and/or
Chronic NOEC or EC_x (for algae or other aquatic plants)	≤ 0.1 mg/l
Category Chronic 2:	
Chronic NOEC or EC_x (for fish)	≤ 1 mg/l and/or
Chronic NOEC or EC_x (for crustacea)	≤ 1 mg/l and/or
Chronic NOEC or EC_x (for algae or other aquatic plants)	≤ 1 mg/l

(ii) Rapidly degradable substances for which there are adequate chronic toxicity data available

Category Chronic 1:	
Chronic NOEC or EC_x (for fish)	≤ 0.01 mg/l and/or
Chronic NOEC or EC_x (for crustacea)	≤ 0.01 mg/l and/or
Chronic NOEC or EC_x (for algae or other aquatic plants)	≤ 0.01 mg/l
Category Chronic 2:	
Chronic NOEC or EC_x (for fish)	≤ 0.1 mg/l and/or
Chronic NOEC or EC_x (for crustacea)	≤ 0.1 mg/l and/or
Chronic NOEC or EC_x (for algae or other aquatic plants)	≤ 0.1 mg/l

* The criteria are based on those developed by the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), as amended.

For definitions of acronyms or terms used in this appendix, refer to the relevant paragraphs of the IMDG Code.

(iii) Substances for which adequate chronic toxicity data are not available

Category Chronic 1:	
96 hr LC_{50} (for fish)	≤ 1 mg/l and/or
48 hr EC_{50} (for crustacea)	≤ 1 mg/l and/or
72 or 96 hr ErC_{50} (for algae or other aquatic plants)	≤ 1 mg/l
and the substance is not rapidly degradable and/or the experimentally determined BCF is ≥ 500 (or, if absent the log K_{ow} ≥ 4).	
Category Chronic 2:	
96 hr LC_{50} (for fish)	>1 mg/l but ≤ 10 mg/l and/or
48 hr EC_{50} (for crustacea)	>1 mg/l but ≤ 10 mg/l and/or
72 or 96 hr ErC_{50} (for algae or other aquatic plants)	>1 mg/l but ≤ 10 mg/l
and the substance is not rapidly degradable and/or the experimentally determined BCF is ≥ 500 (or, if absent, the log K_{ow} ≥ 4).	

Additional guidance on the classification process for substances and mixtures is included in the IMDG Code.

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ANNEX 8

RESOLUTION MEPC.257(67)

Adopted on 17 October 2014

AMENDMENT TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

Amendment to MARPOL Annex III

(Amendment to the appendix on criteria for the identification of harmful substances in packaged form)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 ("1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 ("1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL),

HAVING CONSIDERED proposed amendments to Annex III of MARPOL, developed by the Sub-Committee on Dangerous Goods, Solid Cargoes and Containers (DSC), at its eighteenth session,

1 ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to Annex III of MARPOL, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 September 2015 unless, prior to that date, not less than one third of the Parties or Parties, the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 March 2016 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL, certified copies of the present resolution and the text of the amendments contained in the annex;

5 REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL copies of the present resolution and its annex.

ANNEX

AMENDMENT TO MARPOL ANNEX III

(Amendment to the appendix on criteria for the identification of harmful substances in packaged form)

MARPOL Annex III
Regulations for the prevention of pollution by harmful substances carried by sea in packaged form

Appendix
Criteria for the identification of harmful substances in packaged form

The chapeau of the appendix is replaced by the following:

"For the purpose of this Annex, substances, other than radioactive materials*, identified by any one of the following criteria are harmful substances**.

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* Refer to class 7, as defined in chapter 2.7 of the IMDG Code

** The criteria are based on those developed by the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), as amended. For definitions of acronyms or terms used in this appendix, refer to the relevant paragraphs of the IMDG Code."

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ANNEX 13

RESOLUTION MEPC.201(62)

Adopted on 15 July 2011

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

(Revised MARPOL Annex V)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and article VI of the Protocol of 1978 relating to the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confer upon the appropriate body of the Organization the function of considering and adopting amendments to the 1973 Convention, as modified by the 1978 Protocol (MARPOL 73/78),

HAVING CONSIDERED draft amendments to Annex V of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Annex V of MARPOL 73/78, the text of which is set out at annex to the present resolution;

2. DETERMINES, in accordance with article 16(2)(f)(iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted on 1 July 2012 unless, prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50 per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the said amendments shall enter into force on 1 January 2013 upon their acceptance in accordance with paragraph 2 above;

4. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in the Annex;

5. REQUESTS FURTHER the Secretary-General to transmit to the Members of the Organization which are not Parties to MARPOL 73/78 copies of the present resolution and its Annex.

ANNEX

REVISED MARPOL ANNEX V

REGULATIONS FOR THE PREVENTION OF POLLUTION BY GARBAGE FROM SHIPS

Regulation 1
Definitions

For the purposes of this Annex:

1 *Animal carcasses* means the bodies of any animals that are carried on board as cargo and that die or are euthanized during the voyage.

2 *Cargo residues* means the remnants of any cargo which are not covered by other Annexes to the present Convention and which remain on the deck or in holds following loading or unloading, including loading and unloading excess or spillage, whether in wet or dry condition or entrained in wash water but does not include cargo dust remaining on the deck after sweeping or dust on the external surfaces of the ship.

3 *Cooking oil* means any type of edible oil or animal fat used or intended to be used for the preparation or cooking of food, but does not include the food itself that is prepared using these oils.

4 *Domestic wastes* means all types of wastes not covered by other Annexes that are generated in the accommodation spaces on board the ship. Domestic wastes does not include grey water.

5 *En route* means that the ship is underway at sea on a course or courses, including deviation from the shortest direct route, which as far as practicable for navigational purposes, will cause any discharge to be spread over as great an area of the sea as is reasonable and practicable.

6 *Fishing gear* means any physical device or part thereof or combination of items that may be placed on or in the water or on the sea-bed with the intended purpose of capturing, or controlling for subsequent capture or harvesting, marine or fresh water organisms.

7 *Fixed or floating platforms* means fixed or floating structures located at sea which are engaged in the exploration, exploitation or associated offshore processing of sea-bed mineral resources.

8 *Food wastes* means any spoiled or unspoiled food substances and includes fruits, vegetables, dairy products, poultry, meat products and food scraps generated aboard ship.

9 *Garbage* means all kinds of food wastes, domestic wastes and operational wastes, all plastics, cargo residues, cooking oil, fishing gear, and animal carcasses 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. Garbage does not include fresh fish and parts thereof generated as a result of fishing activities undertaken during the voyage, or as a result of aquaculture activities which involve the transport of fish

including shellfish for placement in the aquaculture facility and the transport of harvested fish including shellfish from such facilities to shore for processing.

10 *Incinerator ashes* means ash and clinkers resulting from shipboard incinerators used for the incineration of garbage.

11 *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 Annex, "from the nearest land" off the north-eastern coast of Australia shall mean from a line drawn from a point on the coast of Australia in:

latitude 11°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 09°10´ S, longitude 143°52´ E,
thence to a point latitude 09°00´ S, longitude 144°30´ E,
thence to a point latitude 10°41´ S, longitude 145°00´ E,
thence to a point latitude 13°00´ S, longitude 145°00´ E,
thence to a point latitude 15°00´ S, longitude 146°00´ E,
thence to a point latitude 17°30´ S, longitude 147°00´ E,
thence to a point latitude 21°00´ S, longitude 152°55´ E,
thence to a point latitude 24°30´ S, longitude 154°00´ E,
thence to a point on the coast of Australia in
latitude 24°42´ S, longitude 153°15´ E.

12 *Operational wastes* means all solid wastes (including slurries) not covered by other Annexes that are collected on board during normal maintenance or operations of a ship, or used for cargo stowage and handling. Operational wastes also includes cleaning agents and additives contained in cargo hold and external wash water. Operational wastes does not include grey water, bilge water, or other similar discharges essential to the operation of a ship, taking into account the guidelines developed by the Organization.

13 *Plastic* means a solid material which contains as an essential ingredient one or more high molecular mass polymers and which is formed (shaped) during either manufacture of the polymer or the fabrication into a finished product by heat and/or pressure. Plastics have material properties ranging from hard and brittle to soft and elastic. For the purposes of this annex, "all plastics" means all garbage that consists of or includes plastic in any form, including synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products.

14 *Special area* means a sea area where for recognized technical reasons in relation to its oceanographic 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.

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, which are defined as follows:

.1 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 5°36´ W.

.2 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.

.3 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.

.4 The Red Sea area means the Red Sea proper including the Gulfs of Suez and Aqaba bounded at the south by the rhumb line between Ras si Ane (12º 28.5´ N, 43º 19.6´ E) and Husn Murad (12º 40.4´ N, 43º 30.2´ E).

.5 The Gulfs area means the sea area located north-west of the rhumb line between Ras al Hadd (22º 30´ N, 59º 48´ E) and Ras al Fasteh (25º 04´ N, 61º 25´ E).

.6 The North Sea area means the North Sea proper including seas therein with the boundary between:

.1 the North Sea southwards of latitude 62º N and eastwards of longitude 4º W;

.2 the Skagerrak, the southern limit of which is determined east of the Skaw by latitude 57º 44.8´ N; and

.3 the English Channel and its approaches eastwards of longitude 5º W and northwards of latitude 48º 30´ N.

.7 The Antarctic area means the sea area south of latitude 60º S.

.8 The Wider Caribbean Region 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 30° N parallel from Florida eastward to 77°30´ W meridian, thence a rhumb line to the intersection of 20° N parallel and 59° W meridian, thence a rhumb line to the intersection of 7°20' N parallel and 50° W meridian, thence a rhumb line drawn southwesterly to the eastern boundary of French Guiana.

Regulation 2
Application

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

Regulation 3
General prohibition on discharge of garbage into the sea

1 Discharge of all garbage into the sea is prohibited, except as provided otherwise in regulations 4, 5, 6 and 7 of this Annex.

2 Except as provided in regulation 7 of this Annex, discharge into the sea of all plastics, including but not limited to synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products is prohibited.

3 Except as provided in regulation 7 of this Annex, the discharge into the sea of cooking oil is prohibited.

Regulation 4
Discharge of garbage outside special areas

1 Subject to the provisions of regulations 5, 6, and 7 of this Annex, discharge of the following garbage into the sea outside special areas shall only be permitted while the ship is en route and as far as practicable from the nearest land, but in any case not less than:

.1 3 nautical miles from the nearest land for food wastes which have been passed through a comminuter or grinder. Such comminuted or ground food wastes shall be capable of passing through a screen with openings no greater than 25 mm.

.2 12 nautical miles from the nearest land for food wastes that have not been treated in accordance with subparagraph .1 above.

.3 12 nautical miles from the nearest land for cargo residues that cannot be recovered using commonly available methods for unloading. These cargo residues shall not contain any substances classified as harmful to the marine environment, taking into account guidelines developed by the Organization.

.4 For animal carcasses, discharge shall occur as far from the nearest land as possible, taking into account the guidelines developed by the Organization.

2 Cleaning agents or additives contained in cargo hold, deck and external surfaces wash water may be discharged into the sea, but these substances must not be harmful to the marine environment, taking into account guidelines developed by the Organization.

3 When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply.

Regulation 5
Special requirements for discharge of garbage from fixed or floating platforms

1 Subject to the provisions of paragraph 2 of this regulation, the discharge into the sea of any garbage is prohibited from fixed or floating platforms and from all other ships when alongside or within 500 m of such platforms.

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

Regulation 6
Discharge of garbage within special areas

1 Discharge of the following garbage into the sea within special areas shall only be permitted while the ship is en route and as follows:

.1 Discharge into the sea of food wastes as far as practicable from the nearest land, but not less than 12 nautical miles from the nearest land or the nearest ice shelf. Food wastes shall be comminuted or ground and shall be capable

of passing through a screen with openings no greater than 25 mm. Food wastes shall not be contaminated by any other garbage type. Discharge of introduced avian products, including poultry and poultry parts, is not permitted in the Antarctic area unless it has been treated to be made sterile.

.2 Discharge of cargo residues that cannot be recovered using commonly available methods for unloading, where all the following conditions are satisfied:

.1 Cargo residues, cleaning agents or additives, contained in hold washing water do not include any substances classified as harmful to the marine environment, taking into account guidelines developed by the Organization;

.2 Both the port of departure and the next port of destination are within the special area and the ship will not transit outside the special area between those ports;

.3 No adequate reception facilities are available at those ports taking into account guidelines developed by the Organization; and

.4 Where the conditions of subparagraphs 2.1, 2.2 and 2.3 of this paragraph have been fulfilled, discharge of cargo hold washing water containing residues shall be made as far as practicable from the nearest land or the nearest ice shelf and not less than 12 nautical miles from the nearest land or the nearest ice shelf.

2 Cleaning agents or additives contained in deck and external surfaces wash water may be discharged into the sea, but only if these substances are not harmful to the marine environment, taking into account guidelines developed by the Organization.

3 The following rules (in addition to the rules in paragraph 1 of this regulation) apply with respect to the Antarctic area:

.1 Each Party 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 garbage from all ships, without causing undue delay, and according to the needs of the ships using them.

.2 Each Party 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.

4 When garbage is mixed with or contaminated by other substances prohibited from discharge or having different discharge requirements, the more stringent requirements shall apply.

Regulation 7
Exceptions

1 Regulations 3, 4, 5 and 6 of this Annex shall not apply to:

.1 The discharge 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

.2 The accidental loss of garbage resulting from damage to a ship or its equipment, provided that all reasonable precautions have been taken before and after the occurrence of the damage, to prevent or minimize the accidental loss; or

.3 The accidental loss of fishing gear from a ship provided that all reasonable precautions have been taken to prevent such loss; or

.4 The discharge of fishing gear from a ship for the protection of the marine environment or for the safety of that ship or its crew.

2 Exception of *en route*:

.1 The *en route* requirements of regulations 4 and 6 shall not apply to the discharge of food wastes where it is clear the retention on board of these food wastes presents an imminent health risk to the people on board.

Regulation 8
Reception facilities

1 Each Party undertakes to ensure the provision of adequate 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 Each Party shall notify the Organization for transmission to the Contracting Parties concerned of all cases where the facilities provided under this regulation are alleged to be inadequate.

3 Reception facilities within special areas

.1 Each Party, the coastline of which borders a special area, undertakes to ensure that as soon as possible, in all ports and terminals within the special area, adequate reception facilities are provided, taking into account the needs of ships operating in these areas.

.2 Each Party concerned shall notify the Organization of the measures taken pursuant to subparagraph 3.1 of this regulation. Upon receipt of sufficient notifications the Organization shall establish a date from which the requirements of regulation 6 of this Annex in respect of the area in question are to take effect. The Organization shall notify all Parties of the date so established no less than twelve months in advance of that date. Until the date so established, ships that are navigating in a special area shall comply with the requirements of regulation 4 of this Annex as regards discharges outside special areas.

Regulation 9
Port State control on operational requirements[1]

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 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 10
Placards, garbage management plans[2] *and garbage record-keeping*

1 .1 Every ship of 12 m or more in length overall and fixed or floating platforms shall display placards which notify the crew and passengers of the discharge requirements of regulations 3, 4, 5 and 6 of this Annex, as applicable.

.2 The placards shall be written in the working language of the ship's crew and, for ships engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention, shall also be in English, French or Spanish.

2 Every ship of 100 gross tonnage and above, and every ship which is certified to carry 15 or more persons, and fixed or floating platforms shall carry a garbage management plan which the crew shall follow. This plan shall provide written procedures for minimizing, collecting, storing, processing and disposing of garbage, including the use of the equipment on board. It shall also designate the person or persons in charge of carrying out the plan. Such a plan shall be based on the guidelines developed by the Organization[2] and written in the working language of the crew.

3 Every ship of 400 gross tonnage and above and every ship which is certified to carry 15 or more persons engaged in voyages to ports or offshore terminals under the jurisdiction of another Party to the Convention and every fixed or floating platform 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:

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1 Refer to the Procedures for port State control adopted by the Organization by resolution A.787(19) and amended by A.882(21); see IMO sales publication IA650E.

2 Refer to the Guidelines for the development of garbage management plans adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.71(38); see MEPC/Circ.317 and IMO sales publication IA656E.

.1 Each discharge into the sea or to a reception facility, or a completed incineration, shall be promptly recorded in the Garbage Record Book and signed for on the date of the discharge or incineration 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 at least in English, French or Spanish. Where the entries are also made in an official language of the State whose flag the ship is entitled to fly, the entries in that language shall prevail in case of a dispute or discrepancy;

.2 The entry for each discharge or incineration shall include date and time, position of the ship, category of the garbage and the estimated amount discharged or incinerated;

.3 The Garbage Record Book shall be kept on board the ship or the fixed or floating platform, and in such a place as to be readily available for inspection at all reasonable times. This document shall be preserved for a period of at least two years from the date of the last entry made in it;

.4 In the event of any discharge or accidental loss referred to in regulation 7 of this Annex an entry shall be made in the Garbage Record Book, or in the case of any ship of less than 400 gross tonnage, an entry shall be made in the ship's official log-book, of the location, circumstances of, and the reasons for the discharge or loss, details of the items discharged or lost, and the reasonable precautions taken to prevent or minimize such discharge or accidental loss.

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

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

.2 Fixed or floating platforms.

5 The competent authority of the Government of a Party to the Convention may inspect the Garbage Record Books or ship's official log–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 those books, 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 or ship's official log-book, shall be admissible in any judicial proceedings as evidence of the facts stated in the entry. The inspection of a Garbage Record Book or ship's official log-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 The accidental loss or discharge of fishing gear as provided for in regulations 7.1.3 and 7.1.3*bis* which poses a significant threat to the marine environment or navigation shall be reported to the State whose flag the ship is entitled to fly, and, where the loss or discharge occurs within waters subject to the jurisdiction of a coastal State, also to that coastal State.

APPENDIX

FORM OF GARBAGE RECORD BOOK

Name of ship: _____

Distinctive number or letters: _____

IMO No.: _____

Period:_____ From: _____ To: _____

1 Introduction

In accordance with regulation 10 of Annex V of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 (MARPOL), a record is to be kept of each discharge operation or completed incineration. This includes discharges into the sea, to reception facilities, or to other ships, as well as the accidental loss of garbage.

2 Garbage and garbage management

Garbage means all kinds of food wastes, domestic wastes and operational wastes, all plastics, cargo residues, cooking oil, fishing gear, and animal carcasses 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. Garbage does not include fresh fish and parts thereof generated as a result of fishing activities undertaken during the voyage, or as a result of aquaculture activities which involve the transport of fish including shellfish for placement in the aquaculture facility and the transport of harvested fish including shellfish from such facilities to shore for processing.

The Guidelines for the Implementation of Annex V of MARPOL[3] should also be referred to for relevant information.

3 Description of the garbage

Garbage is to be grouped into categories for the purposes of the Garbage Record Book (or ship's official log-book) as follows:

A Plastics

B Food wastes

C Domestic Wastes

D Cooking Oil

E Incinerator ashes

F Operational wastes

[3] Refer to the Guidelines for the Implementation of Annex V of MARPOL 73/78, as amended by resolutions.

G Cargo residues

H Animal Carcass(es)

I Fishing Gear[4]

4 Entries in the Garbage Record Book

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

4.1.1 When garbage is discharged to a reception facility[5] ashore or to other ships:

.1 Date and time of discharge
.2 Port or facility, or name of ship
.3 Categories of garbage discharged
.4 Estimated amount discharged for each category in cubic metres
.5 Signature of officer in charge of the operation.

4.1.2 When garbage is incinerated:

.1 Date and time of start and stop of incineration
.2 Position of the ship (latitude and longitude) at the start and stop of incineration
.3 Categories of garbage incinerated
.4 Estimated amount incinerated in cubic metres
.5 Signature of the officer in charge of the operation.

4.1.3 When garbage is discharged into the sea in accordance with regulations 4, 5 or 6 of Annex V of MARPOL:

.1 Date and time of discharge
.2 Position of the ship (latitude and longitude). Note: for cargo residue discharges, include discharge start and stop positions.
.3 Category of garbage discharged
.4 Estimated amount discharged for each category in cubic metres
.5 Signature of the officer in charge of the operation.

4.1.4 Accidental or other exceptional discharges or loss of garbage into the sea, including in accordance with regulation 7 of Annex V of MARPOL:

.1 Date and time of occurrence
.2 Port or position of the ship at time of occurrence (latitude, longitude and water depth if known)
.3 Categories of garbage discharged or lost
.4 Estimated amount for each category in cubic metres
.5 The reason for the discharge or loss and general remarks.

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4 Refer to Guidelines to be developed by the Organization.

5 Ship's masters should obtain from the operator of the reception facilities, which includes barges and trucks, a receipt or certificate specifying the estimated amount of garbage transferred. The receipts or certificates must be kept together with the Garbage Record Book.

4.2 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.

RECORD OF GARBAGE DISCHARGES

Ship's name: _____

Distinctive No., or letters: _____

IMO No.: _____

Garbage categories:

A. Plastics
B. Food wastes
C. Domestic wastes (e.g., paper products, rags, glass, metal, bottles, crockery, etc.)
D. Cooking oil
E. Incinerator Ashes
F. Operational wastes
G. Cargo residues
H. Animal Carcass(es)
I. Fishing gear

NEW TABLE LAYOUT AS BELOW:

Date/ Time	Position of the Ship/Remarks (e.g., accidental loss)	Category	Estimated Amount Discharged or Incinerated	To Sea	To Reception Facility	Incineration	Certification/ Signature

Master's signature:_____ Date: _____

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MARINE ENVIRONMENT PROTECTION COMMITTEE
62nd session
Agenda item 24

MEPC 62/24/Corr.1
26 September 2011
ENGLISH ONLY

REPORT OF THE MARINE ENVIRONMENT PROTECTION COMMITTEE ON ITS SIXTY-SECOND SESSION

Corrigenda

Document MEPC 62/24, annex 12, annex

1 In paragraph 3 of regulation 11, the references to "regulation 12*bis,* subparagraph 2" are replaced by "paragraph 2 of regulation 12*bis*".

2 In paragraph 2 of regulation 12*bis,* the words "subparagraph .1" are replaced by "paragraph 1".

Document MEPC 62/24, annex 13, annex

3 In the first sentence of paragraph 9 of regulation 1, the words "incinerator ashes," are inserted after the words "cargo residues,".

4 The first phrase of paragraph 1 of regulation 4 is deleted and, consequently, paragraph 1 of regulation 4 starts with "Discharge of the following garbage…".

5 In regulation 8, the order of paragraphs 2 and 3 is exchanged.

6 In paragraph 6 of regulation 10, the references to "regulations 7.1.3 and 7.1.3*bis"* are replaced by "regulations 7.1.3 and 7.1.4*"*.

7 In the first sentence of paragraph 2 of the Appendix, the words "incinerator ashes," are inserted after the words "cargo residues,".

Document MEPC 62/24, annex 14, annex

8 In paragraph 3.1 of regulation 14, the reference to "regulation 1.12.6" is replaced by "regulation 1.14.6".

Document MEPC 62/24/Add.1, annex 19, annex

9 In regulation 1, the references to "regulations 3, 5, 6, 13, 15, 16, 18, 19, 20, 21, 22, and 23" are replaced by "regulations 3, 5, 6, 13, 15, 16, 18, 19, 20, 21 and 22".

10 The first sentence in paragraph 1 of regulation 5 is replaced by the following:

> "1 Every ship of 400 gross tonnage and above and every fixed and floating drilling rig and other platforms shall, to ensure compliance with the requirements of chapter 3 of this Annex, be subject to the surveys specified below:".

11 Paragraph 4 of regulation 21 is replaced by the following:

"4 If the design of a ship allows it to fall into more than one of the ship type definitions specified in table 2, the required EEDI for the ship shall be the most stringent (the lowest) required EEDI.".

ANNEX 2

RESOLUTION MEPC.277(70)
(Adopted on 28 October 2016)

AMENDMENTS TO THE ANNEX OF THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO

Amendments to MARPOL Annex V

(HME substances and Form of Garbage Record Book)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

NOTING article 16 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL), which specifies the amendment procedure and confers upon the appropriate body of the Organization the function of considering and adopting amendments thereto,

HAVING CONSIDERED, at its seventieth session, proposed amendments to MARPOL Annex V concerning substances that are harmful to the marine environment (HME) and Form of Garbage Record Book,

1 ADOPTS, in accordance with article 16(2)(d) of MARPOL, amendments to MARPOL Annex V, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of MARPOL, that the amendments shall be deemed to have been accepted on 1 September 2017 unless prior to that date, not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of MARPOL, the said amendments shall enter into force on 1 March 2018 upon their acceptance in accordance with paragraph 2 above;

4 REQUESTS the Secretary-General, for the purposes of article 16(2)(e) of MARPOL, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Parties to MARPOL;

5 REQUESTS FURTHER the Secretary-General to transmit copies of the present resolution and its annex to Members of the Organization which are not Parties to MARPOL.

ANNEX

AMENDMENTS TO MARPOL ANNEX V
(HME substances and Form of Garbage Record Book)

ANNEX V

REGULATIONS FOR THE PREVENTION OF POLLUTION BY GARBAGE FROM SHIPS

Regulation 4
Discharge of garbage outside special areas

1 In the second sentence of paragraph 1.3, the words "taking into account guidelines developed by the Organization" are replaced with the words "in accordance with the criteria set out in appendix I of this Annex".

2 A new paragraph 3 is added as follows:

"3 Solid bulk cargoes as defined in regulation VI/1-1.2 of the International Convention for the Safety of Life at Sea (SOLAS), 1974 , as amended, other than grain, shall be classified in accordance with appendix I of this Annex, and declared by the shipper as to whether or not they are harmful to the marine environment*."

3 The existing paragraph 3 is renumbered as paragraph 4.

Regulation 6
Discharge of garbage within special areas

4 Paragraph 1.2.1 is replaced with the following:

".1 Cargo residues contained in hold washing water do not include any substances classified as harmful to the marine environment according to the criteria set out in appendix I of this Annex;"

5 A new paragraph 1.2.2 is added as follows:

".2 Solid bulk cargoes as defined in regulation VI/1-1.2 of the International Convention for the Safety of Life at Sea (SOLAS), 1974 , as amended, other than grain, shall be classified in accordance with appendix I of this Annex, and declared by the shipper as to whether or not they are harmful to the marine environment*;"

6 A new paragraph 1.2.3 is added as follows:

".3 Cleaning agents or additives contained in hold washing water do not include any substances classified as harmful to the marine environment taking into account guidelines developed by the Organization;"

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* For ships engaged in international voyages, reference is made to section 4.2.3 of the International Maritime Solid Bulk Cargoes (IMSBC) Code; for ships not engaged in international voyages, other means of declaration may be used, as determined by the Administration.

7 The existing paragraphs 1.2.2 to 1.2.4 are renumbered as paragraphs 1.2.4 to 1.2.6. The renumbered paragraph 1.2.6 is amended to read as follows:

".6 Where the conditions of subparagraphs .2.1 to .2.5 of this paragraph have been fulfilled, discharge of cargo hold washing water containing residues shall be made as far as practicable from the nearest land or the nearest ice shelf and not less than 12 nautical miles from the nearest land or the nearest ice shelf."

Regulation 10
Placards, garbage management plans and garbage record-keeping

8 In the chapeau of paragraph 3, the words "the appendix" is replaced with the words "appendix II".

9 Paragraph 3.2 is replaced with the following:

".2 The entry for each discharge into the sea under regulations 4, 5, 6 or section 5.2 of chapter 5 of part II-A of the Polar Code shall include date and time, position of the ship (latitude and longitude), category of the garbage and the estimated amount (in cubic metres) discharged. For discharge of cargo residues the discharge start and stop positions shall be recorded in addition to the foregoing;"

10 After the existing paragraph 3.2, new paragraphs 3.3 and 3.4 are inserted as follows:

".3 The entry for each completed incineration shall include date and time and position of the ship (latitude and longitude) at the start and stop of incineration, categories of garbage incinerated and the estimated amount incinerated for each category in cubic metres;

.4 The entry for each discharge to a port reception facility or another ship shall include date and time of discharge, port or facility or name of ship, categories of garbage discharged, and the estimated amount discharged for each category in cubic metres;"

11 The existing paragraph 3.3 is renumbered as 3.5 and between the words "Book" and "shall", the words "along with receipts obtained from reception facilities" are inserted.

12 The existing paragraph 3.4 is renumbered as 3.6 and is replaced with the following:

".6 In the event of any discharge or accidental loss referred to in regulation 7 of this Annex an entry shall be made in the Garbage Record Book, or in the case of any ship of less than 400 gross tonnage, an entry shall be made in the ship's official log-book of the date and time of occurrence, port or position of the ship at time of occurrence (latitude, longitude and water depth if known), the reason for the discharge or loss, details of the items discharged or lost, categories of garbage discharged or lost, estimated amount for each category in cubic metres, reasonable precautions taken to prevent or minimize such discharge or accidental loss and general remarks."

13 A new appendix I is added as follows and the existing appendix is renumbered as appendix II:

"Appendix I

Criteria for the classification of solid bulk cargoes as harmful to the marine environment

For the purpose of this Annex, cargo residues are considered to be harmful to the marine environment (HME) if they are residues of solid bulk cargoes which are classified according to the criteria of the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) meeting the following parameters[1]:

.1 Acute Aquatic Toxicity Category 1; and/or

.2 Chronic Aquatic Toxicity Category 1 or 2; and/or

.3 Carcinogenicity[2] Category 1A or 1B combined with not being rapidly degradable and having high bioaccumulation; and/or

.4 Mutagenicity[2] Category 1A or 1B combined with not being rapidly degradable and having high bioaccumulation; and/or

.5 Reproductive Toxicity[2] Category 1A or 1B combined with not being rapidly degradable and having high bioaccumulation; and/or

.6 Specific Target Organ Toxicity Repeated Exposure[2] Category 1 combined with not being rapidly degradable and having high bioaccumulation; and/or

.7 Solid bulk cargoes containing or consisting of synthetic polymers, rubber, plastics, or plastic feedstock pellets (this includes materials that are shredded, milled, chopped or macerated or similar materials)."

Appendix II

Form of Garbage Record Book

14 Section 3 of the renumbered appendix II is replaced with the following:

"3 Description of the garbage

Garbage is to be grouped into categories for the purposes of recording in parts I and II of the Garbage Record Book (or ship's official log-book) as follows:

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1 The criteria are based on UN GHS. For specific products (e.g. metals and inorganic metal compounds) guidance available in UN GHS, annexes 9 and 10 is essential for proper interpretation of the criteria and classification and should be followed.

2 Products that are classified for Carcinogenicity, Mutagenicity, Reproductive Toxicity or Specific Target Organ Toxicity Repeated Exposure for oral and dermal hazards or without specification of the exposure route in the hazard statement.

Part I

A Plastics
B Food wastes
C Domestic wastes
D Cooking oil
E Incinerator ashes
F Operational wastes
G Animal carcasses
H Fishing gear
I E-waste

Part II

J Cargo residues (non-HME)
K Cargo residues (HME)"

15 The Record of Garbage Discharges in the renumbered appendix II is replaced with the following:

"RECORD OF GARBAGE DISCHARGES

PART I
For all garbage other than cargo residues as defined in regulation 1.2 (Definitions)

(All ships)

Ship's name	Distinctive number or letters	IMO number

Garbage categories

A-Plastics	**B-**Food waste	**C-**Domestic wastes	**D-**Cooking oil	
E-Incinerator ashes	**F-**Operational wastes	**G-**Animal carcasses	**H-**Fishing gear	**I**–E-waste

Discharges under MARPOL Annex V regulations 4 (Discharge of garbage outside special areas), 5 (Special requirements for discharge of garbage from fixed or floating platforms) or 6 (Discharge of garbage within special areas) or chapter 5 of part II-A of the Polar Code

Date/ Time	Position of the ship (latitude/longitude) **or** port if discharged ashore **or** name of ship if discharged to another ship	Category	Estimated amount discharged		Estimated amount incinerated (m^3)	Remarks: (e.g. start/stop time and position of incineration; general remarks)	Certification/ Signature
			Into sea (m^3)	To reception facilities or to another ship (m^3)			
/ :							

/ :							
/ :							
/ :							

Exceptional discharge or loss of garbage under regulation 7 (Exceptions)

Date/ Time	Port or position of the ship (latitude/ longitude and water depth if known)	Category	Estimated amount lost or discharged (m^3)	Remarks on the reason for the discharge or loss and general remarks (e.g. reasonable precautions taken to prevent or minimize such discharge or accidental loss and general remarks)	Certification/ Signature
/ :					
/ :					

Master's signature:_____ Date: _____

PART II
For all cargo residues as defined in regulation 1.2 (Definitions)

(Ships that carry solid bulk cargoes)

Ship's name	Distinctive number or letters	IMO number

Garbage categories

J- Cargo residues (non-HME)	**K-** Cargo residues (HME)

Discharges under regulations 4 (Discharge of garbage outside special areas) and 6 (Discharge of garbage within special areas)

Date/ Time	Position of the ship (latitude/ longitude) or port if discharged ashore	Category	Estimated amount discharged		Start and stop positions of the ship for discharges into the sea	Certification/ Signature
			Into sea (m^3)	To reception facilities or to another ship (m^3)		

/ :						
/ :						
/ :						
/ :						

Master's signature:_____ Date: _____"

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