RESOLUTION MEPC 14(20)

adopted on 7 September 1984

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

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

NOTING the functions which Article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and resolution A.297(VIII) confer on the Marine Environment Protection Committee for the consideration and adoption of amendments to the 1973 Convention,

NOTING FURTHER 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"),

HAVING CONSIDERED at its twentieth session amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS in accordance with article 16(2)(d) of the 1973 Convention amendments to the Annex of the 1978 Protocol, 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 7 July 1985 unless prior to this date one third or more of the Parties or the Parties, the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that in accordance with article 16(2)(g)(ii) of the 1973 Convention the amendments shall enter into force on 7 January 1986 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 1978 Protocol certified copies of the present resolution and the text of the amendments contained in the Annex;

5. FURTHER REQUESTS the Secretary-General to transmit to the Members of the Organization which are not Parties to the 1978 Protocol copies of the resolution and its Annex.

ANNEX

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

ANNEX I

REGULATIONS FOR THE PREVENTION OF POLLUTION BY OIL

Regulation 1

Definitions

The existing texts of paragraphs (26) and (27) are replaced by the following:

"(26) Notwithstanding the provisions of paragraph (6) of this Regulation, for the purposes of Regulations 13, 13B, 13E and 18(4) of this Annex, "new oil tanker" means an oil tanker:

(a) for which the building contract is placed after 1 June 1979; or

(b) in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction after 1 January 1980; or

(c) the delivery of which is after 1 June 1982; or

(d) which has undergone a major conversion:

(i) for which the contract is placed after 1 June 1979; or

(ii) in the absence of a contract, the construction work of which is begun after 1 January 1980; or

(iii) which is completed after 1 June 1982;

except that, for oil tankers of 70,000 tons deadweight and above, the definition in paragraph (6) of this Regulation shall apply for the purposes of Regulation 13(1) of this Annex.

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

Regulation 9

Control of Discharge of Oil

The existing text of sub-paragraph (1)(a)(vi) is replaced by the following:

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

The existing text of sub-paragraph (1)(b)(v) is replaced by the following:

"(v) the ship has in operation an oil discharge monitoring and control system, oily-water separating equipment, oil filtering equipment or other installation as required by Regulation 16 of this Annex."

The existing text of paragraph (4) is replaced by the following:

"(4) The provisions of paragraph (1) of this Regulation shall not apply to the discharge of clean or segregated ballast or unprocessed oily mixtures which without dilution have an oil content not exceeding 15 parts per million and which do not originate from cargo pump-room bilges and are not mixed with oil cargo residues. The provisions of sub-paragraph (1)(b) of this Regulation shall not apply to the discharge of the processed oily mixture, provided that all of the following conditions are satisfied:

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

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

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

(d) the ship has in operation oil filtering equipment complying with Regulation 16(7) of this Annex."

Regulation 10

Methods for the Prevention of Oil Pollution from Ships while Operating in Special Areas

The existing texts of paragraphs (2), (3) and (4) are replaced by the following:

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

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

(b) any discharge into the sea of oil or oily mixture from a ship of less than 400 tons gross tonnage, other than an oil tanker, shall be prohibited while in a special area, except when the oil content of the effluent without

dilution does not exceed 15 parts per million or alternatively when all of the following conditions are satisfied:

(i) the ship is proceeding en route;

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

(iii) the discharge is made as far as practicable from the land, but in no case less than 12 nautical miles from the nearest land.

(3) (a) The provisions of paragraph (2) of this Regulation shall not apply to the discharge of clean or segregated ballast.

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

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

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

(iii) the ship is proceeding en route;

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

(v) the ship has in operation oil filtering equipment complying with Regulation 16(7) of this Annex; and

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

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

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

Regulation 13

Segregated Ballast Tanks, Dedicated Clean Ballast Tanks and Crude Oil Washing

The existing text of paragraph (3) is replaced by the following:

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

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

(b) in exceptional cases where the particular character of the operation of an oil tanker renders it necessary to carry ballast water in excess of the

quantity required under paragraph (2) of this Regulation, provided that such operation of the oil tanker falls under the category of exceptional cases as established by the Organization.

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

Regulation 13A

Requirements for Oil Tankers with Dedicated Clean Ballast Tanks

Paragraph (4)(b) is deleted and paragraph (4)(a) is renumbered as (4).

Regulation 13B

Requirements for Crude Oil Washing

The following words are added to the end of paragraph (3):

"and as may be further amended."

Paragraph (5)(b) is deleted and paragraph (5)(a) is renumbered as (5).

Regulation 13C

Existing Tankers Engaged in Specific Trades

The first phrase of paragraph (1) is amended to read as follows:

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

The existing text of paragraph (2)(a) is replaced by the following:

"(a) subject to the exceptions provided for in Regulation 11 of this Annex, all ballast water, including clean ballast water, and tank washing residues are retained on board and transferred to the reception facilities and the appropriate entry in the Oil Record Book referred to in Regulation 20 of this Annex is endorsed by the competent Port State Authority;"

Paragraph (3) is deleted.

Regulation 14

The title of the Regulation is replaced by the following:

"Segregation of Oil and Water Ballast and Carriage of Oil in Forepeak Tanks"

The following new paragraphs are added to the existing text:

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

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

Regulation 15

Retention of Oil on Board

The existing text of paragraph (2)(c) is replaced by the following:

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

(i) 2 per cent for such oil tankers where the tank washing arrangements are such that once the slop tank or tanks are charged with washing water, this water is sufficient for tank washing and, where applicable, for providing the driving fluid for eductors, without the introduction of additional water into the system;

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

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

New oil tankers of 70,000 tons deadweight and above shall be provided with at least two slop tanks."

The last sentence of the existing text of paragraph (3)(a) is replaced by the following:

"(a) The oil discharge monitoring and control system shall be designed and installed in compliance with the Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers developed by the Organization.* Administrations may accept such specific arrangements as detailed in the Guidelines and Specification."

The following footnote is added to paragraph (3)(a):

"* Reference is made to the Guidelines and Specifications for Oil Discharge Monitoring and Control Systems for Oil Tankers adopted by the Organization by resolution A.496(XII)."

The existing text of paragraph (5) is replaced by the following:

"(5) (a) The Administration may waive the requirements of paragraphs (1), (2) and (3) of this Regulation for any oil tanker which engages exclusively on voyages both of 72 hours or less in duration and within 50 miles from the nearest land, provided that the oil tanker is engaged exclusively in trades between ports or terminals within a State Party to the present Convention. Any such waiver shall be subject to the requirement that the oil tanker shall retain on board all oily mixtures for subsequent discharge to reception facilities and to the determination by the Administration that facilities available to receive such oily mixtures are adequate.

(b) The Administration may waive the requirements of paragraph (3) of this Regulation for oil tankers other than those referred to in sub-paragraph (a) of this paragraph in cases where:

(i) the tanker is an existing oil tanker of 40,000 tons deadweight or above, as referred to in Regulation 13C(1) of this Annex, engaged in specific trades, and the conditions specified in Regulation 13C(2) are complied with; or

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

(1) voyages within special areas; or

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

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

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

provided that all of the following conditions are complied with:

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

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

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

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

The existing text of paragraph (7) is replaced by the following:

"(7) The requirements of paragraphs (1), (2) and (3) of this Regulation shall not apply to oil tankers carrying asphalt or other products subject to the provisions of this Annex, which through their physical properties inhibit effective product/water separation and monitoring, for which the control of discharge under Regulation 9 of this Annex shall be effected by the retention of residues on board with discharge of all contaminated washings to reception facilities."

Regulation 16

The existing text of Regulation 16 is replaced by the following:

"Oil Discharge Monitoring and Control System and Oily-Water Separating and Oil Filtering Equipment

(1) Any ship of 400 tons gross tonnage and above but less than 10,000 tons gross tonnage shall be fitted with oily-water separating equipment (100 ppm equipment) complying with paragraph (6) of this Regulation. Any such ship which carries large quantities of oil fuel shall comply with paragraph (2) of this Regulation or paragraph (1) of Regulation 14.

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

(a) with oily-water separating equipment (100 ppm equipment) complying with paragraph (6) of this Regulation and with an oil discharge monitoring and control system complying with paragraph (5) of this Regulation; or

(b) with oil filtering equipment (15 ppm equipment) complying with paragraph (7) of this Regulation.

(3) (a) The Administration may waive the requirements of paragraphs (1) and (2) of this Regulation for any ship engaged exclusively on:

(i) voyages within special areas; or

(ii) voyages within 12 miles of the nearest land outside special areas, provided the ship is in:

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

(2) restricted voyages as determined by the Administration;

provided that all of the following conditions are complied with:

(iii) 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;

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

(v) 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;

(vi) the International Oil Pollution Prevention Certificate, when required, is endorsed to the effect that the ship is exclusively engaged on the voyages specified in sub-paragraph (a)(i) or (a)(ii)(2) of this paragraph; and

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

(b) The Administration shall ensure that ships of less than 400 tons gross tonnage are equipped, as far as practicable, to retain on board oil or oily mixtures or discharge them in accordance with the requirements of Regulation 9(1)(b) of this Annex.

(4) For existing ships the requirements of paragraphs (1), (2) and (3) of this Regulation shall apply three years after the date of entry into force of the present Convention.

(5) An oil discharge monitoring and control system shall be of a design approved by the Administration. In considering the design of the oil content meter to be incorporated into 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 oil content in parts per million. This record shall be identifiable as to time and date and shall be kept for at least three years. The system shall come into operation when there is any discharge of effluent into the sea and shall be such as will ensure that any discharge of oily mixture is automatically stopped when the oil content of effluent exceeds that permitted by Regulation 9(1)(b) of this Annex. Any failure of the system shall stop the discharge and be noted in the Oil Record Book. The defective unit shall be made operable before the ship commences its next voyage unless it is proceeding to a repair port. Existing ships shall comply with all of the provisions specified above except that the stopping of the discharge may be performed manually.

(6) Oily-water separating equipment referred to in paragraphs (1) and (2)(a) 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 of less than 100 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)(b) of this Regulation shall be of a design approved by the Administration and shall be such as will ensure that any oily mixture discharged into the sea after passing through the system or systems has an oil content not exceeding 15 parts per million. It shall be provided with alarm arrangements to indicate when this level cannot be maintained. In considering the design of such equipment, the Administration shall have regard to the specification recommended by the Organization.* In the case of ships less than 10,000 tons gross tonnage, other than those carrying large quantities of oil fuel or those discharging bilge water under Regulation 10(3)(b), which are provided with oil filtering equipment in lieu of oily-water separating equipment, the requirements for the alarm arrangements shall be complied with as far as reasonable and practicable."

The following footnote is added to paragraphs (5), (6) and (7) of Regulation 16:

"* Reference is made 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)."

Regulation 18

Pumping, Piping and Discharge Arrangements of Oil Tankers

The existing text of Regulation 18 is replaced by the following:

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

(2) In every oil tanker, pipelines for the discharge to the sea of ballast water or oil contaminated water from cargo tank areas which may be permitted under Regulation 9 or Regulation 10 of this Annex shall be led to the open deck or to the ship's side above the waterline in the deepest ballast condition. Different piping arrangements to permit operation in the manner permitted in sub-paragraphs (6)(a) to (e) of this Regulation may be accepted.

(3) In new oil tankers means shall be provided for stopping the discharge into the sea of ballast water or oil contaminated water from cargo tank areas, other than those discharges below the waterline permitted under paragraph (6) of this Regulation, from a position on the upper deck or above located so that the manifold in use referred to in paragraph (1) of this Regulation and the discharge to the sea from the pipelines referred to in paragraph (2) of this Regulation may be visually observed. Means for stopping the discharge need not be provided at the observation position if a positive communication system such as a telephone or radio system is provided between the observation position and the discharge control position.

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

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

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

(5) Every existing crude oil tanker required to be provided with segregated ballast tanks, or to be fitted with a crude oil washing system, or to operate with dedicated clean ballast tanks, shall comply with the provisions of paragraph (4)(b) of this Regulation.

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

(a) Segregated ballast and clean ballast may be discharged below the waterline:

(i) in ports or at offshore terminals, or

(ii) at sea by gravity,

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

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

(c) Existing oil tankers operating with dedicated clean ballast tanks, which without modification are not capable of discharging ballast water from dedicated clean ballast tanks above the waterline, may discharge this ballast below the waterline provided that the discharge of the ballast water is supervised in accordance with Regulation 13A(3) of this Annex.

(d) On every oil tanker at sea, dirty ballast water or oil contamined water from tanks in the cargo area, other than slop tanks, may be discharged by gravity below the waterline, provided that sufficient time has elapsed in order to allow oil/water separation to have taken place and the ballast water has been examined immediately before the discharge with an oil/water interface detector referred to in Regulation 15(3)(b) of this Annex, in order to ensure that the height of the interface is such that the discharge does not involve any increased risk of harm to the marine environment.

(e) On existing oil tankers at sea, dirty ballast water or oil contaminated water from cargo tank areas may be discharged below the waterline, subsequent to or in lieu of the discharge by the method referred to in sub-paragraph (d) of this paragraph, provided that:

(i) a part of the flow of such water is led through permanent piping to a readily accessible location on the upper deck or above where it may be visually observed during the discharge operation; and

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

Regulation 20

Oil Record Book

The existing texts of paragraphs (1) and (2) are replaced by the following:

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

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

(a) for machinery space operations (all ships):

(i) ballasting or cleaning of oil fuel tanks;

(ii) discharge of dirty ballast or cleaning water from tanks referred to under (i) of the sub-paragraph;

(iii) disposal of oily residues (sludge);

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

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

(i) loading of oil cargo;

(ii) internal transfer of oil cargo during voyage;

(iii) unloading of oil cargo;

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

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

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

(vii) discharge of water from slop tanks;

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

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

(x) disposal of residues."

The second sentence of paragraph (4) is replaced by the following:

"Each completed operation shall be signed by the officer or officers in charge of the operations concerned and each completed page shall be signed by the master of the ship."

The following new paragraph is added to the existing text:

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

Regulation 21

Special Requirements for Drilling Rigs and other Platforms

The following new sub-paragraph is added to the existing text:

"(d) Outside special areas and more than 12 nautical miles from the nearest land and subject to the provisions of Regulation 11 of this Annex, the discharge from such drilling rigs and platforms when stationary into the sea of oil or oily mixtures shall be prohibited except when the oil content of the discharges without dilution does not exceed 100 parts per million unless there are appropriate national regulations which are more stringent, in which case the appropriate national regulations shall apply."

Regulation 25

Subdivision and Stability

The existing text of sub-paragraph (a) of paragraph (2) is replaced by the following and sub-paragraphs (b), (c) and (d) are renumbered as (d), (e) and (f):

"(a) Side damage

(i) Longitudinal extent	$1/3(L^{2/3})$ or 14.5 metres, whichever is less
(ii) Transverse extent (Inboard from the ship's side at right angles to the centreline at the level of the summer load line)	B/5 or 11.5 metres, whichever is less

	(iii) Vertical extent		From the moulded line of the bottom shell plating at centreline, upwards without limit
(b)	Bottom damage	For 0.3L from the forward perpendicular of the ship	Any other part of the ship
	(i) Longitudinal extent	$1/3(L^{2/3})$ or 14.5 metres, whichever is less	$1/3(L^{2/3})$ or 5 metres, whichever is less
	(ii) Transverse extent	B/6 or 10 metres, whichever is less	B/6 or 5 metres, whichever is less
	(iii) Vertical extent	B/15 or 6 metres, whichever is less, measured from the moulded line of the bottom shell plating at centreline	B/15 or 6 metres, whichever is less, measured from the moulded line of the bottom shell plating at centreline

(c) If any damage of a lesser extent than the maximum extent of damage specified in sub-paragraphs (a) and (b) of this paragraph would result in a more severe condition, such damage shall be considered."

The existing text of sub-paragraph (3)(c) is replaced by the following:

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

The following new sub-paragraph is added to the existing text of paragraph (3):

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

The existing text of paragraph (4)(b) is replaced by the following:

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

Spaces	*Permeabilities*
Appropriated to stores	0.60
Occupied by accommodation	0.95
Occupied by machinery	0.85
Voids	0.95
Intended for consumable liquids	0 to 0.95*
Intended for other liquids	0 to 0.95*

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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."

The first phrase of paragraph (5) is amended to read:

"(5) The Master of every new oil tanker and the person in charge of a new non-self-propelled oil tanker to which this Annex applies shall be supplied in an approved form with:"

Appendix II

The existing form of Certificate is replaced by the following forms:

"FORMS OF 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 (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)

Name of ship	Distinctive number or letters	Port of registry	Gross tonnage

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*

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* Delete as appropriate.

THIS IS TO CERTIFY:

1. That the ship has been surveyed in accordance with Regulation 4 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 4 of Annex I of the Convention.

Issued at.....
(Place of issue of Certificate)

.....19..
(Date of issue)

.....
(Signature of duly 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 4 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 .....

(Seal or stamp of the Authority, as appropriate)

Annual*/Intermediate* survey:

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

Place .....

Date .....

(Seal or stamp of the Authority, as appropriate)

Annual*/Intermediate* survey:

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

Place .....

Date .....

(Seal 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)

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* 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, 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 Status of ship:

1.7.1 New ship in accordance with Regulation 1(6) ☐

1.7.2 Existing ship in accordance with Regulation 1(7) ☐

1.7.3 The ship has been accepted by the Administration as an "existing ship" under Regulation 1(7) due to unforeseen delay in delivery ☐

2 EQUIPMENT FOR THE CONTROL OF OIL DISCHARGE FROM MACHINERY SPACE BILGES AND OIL FUEL TANKS (Regulations 10 and 16)

2.1 Carriage of ballast water in oil fuel tanks:

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

2.1.2 The ship does not under normal conditions carry ballast water in oil fuel tanks ☐

2.2 Type of separating/filtering equipment fitted:

2.2.1 Equipment capable of producing effluent with oil content less than 100 ppm; ☐

2.2.2 Equipment capable of producing effluent with oil content not exceeding 15 ppm ☐

2.3 Type of control system:

2.3.1 Discharge monitoring and control system (Regulation 16(5))

.1 with automatic stopping device ☐

.2 with manual stopping device ☐

2.3.2 15 ppm alarm (Regulation 16(7)) ☐

2.3.3 Automatic stopping device for discharges in special areas (Regulation 10(3)(b)(vi)) ☐

2.3.4 Oil content meter (resolution A.444(XI))

.1 with recording device ☐

.2 without recording device ☐

2.4 Approval standards:

2.4.1 The separating/filtering equipment:

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

.2 has been approved in accordance with resolution A.233(VII) ☐

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

.4 has not been approved ☐

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

2.4.3 The oil content meter has been approved in accordance with resolution A.393(X) ☐

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

2.6 Application:

2.6.1 The ship is not required to be fitted with the above equipment until ..... 19 . .* in accordance with Regulation 16(4) ☐

3 TANKS FOR OIL RESIDUES (SLUDGE) (Regulation 17)

3.1 The ship is provided with oil residue (sludge) tanks with the total capacity of .....m^3 ☐

3.2 Means for the disposal of oil residue in addition to the provision of sludge tanks..... ..... ☐

4 STANDARD DISCHARGE CONNECTION (Regulation 19)

4.1 The ship is provided with a pipeline for the discharge of residues from machinery bilges to reception facilities, fitted with a standard discharge connection in accordance with Regulation 19 ☐

---

* Insert the date three years after the date of entry into force of the Convention.

5 EXEMPTION

5.1 Exemptions have been granted by the Administration from the requirements of Chapter II of Annex I of the Convention in accordance with Regulation 2(4)(a) on those items listed under paragraphs(s) .....
.....
of this Record.

6 EQUIVALENTS (Regulation 3)

6.1 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)

.....19..

.....
(Signature of duly authorized officer 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 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, 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 Carrying capacity of ship .....(m^3)

1.6 Deadweight of ship .....(metric tons) (Regulation 1(22))

1.7 Length of ship .....(m)(Regulation 1(18))

1.8 Date of build:

1.8.1 Date of building contract .....

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 Status of ship:

1.10.1 New ship in accordance with Regulation 1(6) ☐

1.10.2 Existing ship in accordance with Regulation 1(7) ☐

1.10.3 New oil tanker in accordance with Regulation 1(26) ☐

1.10.4 Existing oil tanker in accordance with Regulation 1(27) ☐

1.10.5 The ship has been accepted by the Administration as an "existing ship" under Regulation 1(7) due to unforeseen delay in delivery ☐

1.10.6 The ship has been accepted by the Administration as an "existing oil tanker" under Regulation 1(27) due to unforeseen delay in delivery ☐

1.10.7 The ship is not required to comply with the provisions of Regulation 24 due to the unforeseen delay in delivery ☐

1.11 Type of ship:

1.11.1 Crude oil tanker ☐

1.11.2 Product carrier ☐

1.11.3 Crude oil/product carrier ☐

1.11.4 Combination carrier ☐

1.11.5 Ship, other than an oil tanker, with cargo tanks coming under Regulation 2(2) of Annex I of the Convention ☐

1.11.6 Oil tanker dedicated to the carriage of products referred to in Regulation 15(7) ☐

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

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

1.11.9 Chemical tanker carrying oil ☐

2 EQUIPMENT FOR THE CONTROL OF OIL DISCHARGE FROM MACHINERY SPACE BILGES AND OIL FUEL TANKS (Regulations 10 and 16)

2.1 Carriage of ballast water in oil fuel tanks

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

2.1.2 The ship does not under normal conditions carry ballast water in oil fuel tanks ☐

2.2 Type of separating/filtering equipment fitted:

2.2.1 Equipment capable of producing effluent with oil content less than 100 ppm ☐

2.2.2 Equipment capable of producing effluent with oil content not exceeding 15 ppm ☐

2.3 Type of control system

2.3.1 Discharge monitoring and control system (Regulation 16(5))

.1 with automatic stopping device ☐

.2 with manual stopping device ☐

2.3.2 15 ppm alarm (Regulation 16(7)) ☐

2.3.3 Automatic stopping device for discharges in special areas (Regulation 10(3)(b)(vi)) ☐

2.3.4 Oil content meter (resolution A.444(XI))

.1 with recording device ☐

.2 without recording device ☐

2.4 Approval standards:

2.4.1 The separating/filtering system:

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

.2 has been approved in accordance with resolution A.233(VII) ☐

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

.4 has not been approved ☐

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

2.4.3 The oil content meter has been approved in accordance with resolution A.393(X) ☐

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

2.6 Application:

2.6.1 The ship is not required to be fitted with the above equipment until ..... 19 ..* in accordance with Regulation 16(4) ☐

3 TANKS FOR OIL RESIDUES (SLUDGE) (Regulation 17)

3.1 The ship is provided with oil residue (sludge) tanks with the total capacity of .....m^3 ☐

3.2 Means for the disposal of oil residue in addition to the provision of sludge tanks ..... ☐

.....

4 STANDARD DISCHARGE CONNECTION (Regulation 19)

4.1 The ship is provided with a pipeline for the discharge of residues from machinery bilges to reception facilities, fitted with a standard discharge connection in compliance with Regulation 19 ☐

5 CONSTRUCTION (Regulations 13, 24 and 25)

5.1 In accordance with the requirements of Regulation 13, the ship is

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

5.1.2 Required to be provided with SBT and PL ☐

5.1.3 Required to be provided with SBT ☐

---

* Insert the date three years after the date of entry into force of the Convention.

5.1.4 Required to be provided with SBT, CBT 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 13 ☐

5.2 Segregated ballast tanks (SBT)

5.2.1 The ship is provided with SBT in compliance with Regulation 13 ☐

5.2.2 The ship is provided with SBT which are arranged in protective locations (PL) in compliance with Regulation 13E ☐

5.2.3 SBT are distributed as follows:

Tank	Volume (m^3)	Tank	Volume (m^3)
		Total	

5.3 Dedicated clean ballast tanks (CBT)

5.3.1 The ship is provided with CBT in compliance with Regulation 13A, and may operate:

.1 as a product carrier ☐

.2 as a crude oil tanker until .....19 ..* ☐

5.3.2 CBT are distributed as follows:

Tank	Volume (m^3)	Tank	Volume (m^3)
		Total	

* Insert the date two years or four years after the date of entry into force of the Convention as appropriate.

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 13B ☐

5.4.2 The ship is equipped with a COW system in compliance with Regulation 13B except that the effectiveness of the system has not been confirmed in accordance with Regulation 13(6) and paragraph 4.2.10 of the Revised COW Specifications (resolution A.446(XI)) ☐

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 Revised COW Specifications (resolution A.446(XI)) ☐

5.5 Exemption from Regulation 13:

5.5.1 The ship is solely engaged in trade between ..... in accordance with Regulation 13C and is therefore exempted from the requirements of Regulation 13 ☐

5.5.2 The ship is operating with special ballast arrangements in accordance with Regulation 13D and is therefore exempted from the requirements of Regulation 13 ☐

5.6 Limitation of size and arrangements of cargo tanks (Regulation 24)

5.6.1 The ship is required to be constructed according to, and complies with, the requirements of Regulation 24 ☐

5.6.2 The ship is required to be constructed according to, and complies with, the requirements of Regulation 24(4) (see Regulation 2(2)) ☐

5.7 Subdivision and stability (Regulation 25)

5.7.1 The ship is required to be constructed according to, and complies with, the requirements of Regulation 25 ☐

5.7.2 Information and data required under Regulation 25(5) in an approved form have been supplied to the ship ☐

6 RETENTION OF OIL ON BOARD (Regulation 15)

6.1 Oil discharge monitoring and control system

6.1.1 The ship comes under category .....oil tanker as defined in resolution A.496(XII) ☐

6.1.2 The system comprises:

.1 control unit ☐

.2 computing unit ☐

.3 calculating unit ☐

6.1.3 The system is:

.1 fitted with a starting interlock ☐

.2 fitted with automatic stopping device ☐

6.1.4 The oil content meter is approved under the terms of resolution A.393(X) suitable for:

.1 crude oil ☐

.2 black products ☐

.3 white products ☐

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

6.1.6 The ship is not required to be fitted with an oil discharge monitoring and control system, until .....19..* in accordance with Regulation 15(1) ☐

6.2 Slop tanks

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

---

* Insert the date three years after the date of entry into force of the Convention.

.1 Regulation 15(2)(c) ☐

.2 Regulation 15(2)(c)(i) ☐

.3 Regulation 15(2)(c)(ii) ☐

.4 Regulation 15(2)(c)(iii) ☐

6.2.2 Cargo tanks have been designated as slop tanks ☐

6.2.3 The ship is not required to be provided with slop tank arrangements until .....19..* in accordance with Regulation 15(1) ☐

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 Regulation 15

6.4.1 The ship is exempted from the requirements of Regulation 15(1), (2) and (3) in accordance with Regulation 15(7) ☐

6.4.2 The ship is exempted from the requirements of Regulation 15(1), (2) and (3) in accordance with Regulation 2(2) ☐

7 PUMPING, PIPING AND DISCHARGE ARRANGEMENTS (Regulation 18)

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, for dirty ballast are located:**

7.3.1 above the waterline ☐

---

* Insert the date three years after the date of entry into force of the Convention.

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

7.3.2 below the waterline in conjunction with the part flow arrangements in compliance with Regulation 18(6)(e) ☐

7.3.3 below the waterline ☐

7.4 Discharge of oil from cargo pumps and oil lines (Regulation 18(4) and (5))

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

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

.2 for discharge ashore a special small diameter line is provided ☐

8 EQUIVALENT ARRANGEMENTS FOR CHEMICAL TANKERS CARRYING OIL

8.1 As equivalent arrangements for the carriage of oil by a chemical tanker, the ship is fitted with the following equipment in lieu of slop tanks (paragraph 6.2 above) and oil/water interface detectors (paragraph 6.3 above):

8.1.1 oily-water separating equipment capable of producing effluent with oil content less than 100 ppm, with the capacity of .....m^3/h ☐

8.1.2 a holding tank with the capacity of .....m^3 ☐

8.1.3 a tank for collecting tank washings which is:

.1 a dedicated tank ☐

.2 a cargo tank designated as a collecting tank ☐

8.1.4 a permanently installed transfer pump for overboard discharge of effluent containing oil through the oily-water separating equipment ☐

8.2 The oily-water separating equipment has been approved under the terms of resolution A.393(X) and is suitable for the full range of Annex I products ☐

8.3 The ship holds a valid Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk ☐

9 EXEMPTION

9.1 Exemptions have been granted by the Administration from the requirements of Chapters II and III of Annex I of the Convention in accordance with Regulation 2(4)(a) on those items listed under paragraph(s) .....
.....
of this Record.

10 EQUIVALENTS (Regulation 3)

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

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

Issued at .....
(Place of issue of the Record)

..... 19..

.....
(Signature of duly authorized officer issuing the Record)

(Seal or stamp of the issuing Authority, as appropriate)"

Appendix III

The existing Forms of Oil Record Books and Supplements are replaced by the following forms:

"FORMS OF OIL RECORD BOOKS

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 tons gross tonnage and above and every ship of 400 tons gross tonnage and above, other than oil tankers, to record relevant machinery space operations. For oil tankers, Oil Record Book Part 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 in accordance with Regulation 20 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78). The items have been grouped into operational sections, each of which is denoted by a letter code.

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

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

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. Position of ship at start of cleaning.
4. Position of ship at start of ballasting.

(B) *DISCHARGE OF DIRTY BALLAST OR CLEANING WATER FROM OIL FUEL TANKS REFERRED TO UNDER SECTION (A)*

5. Identity of tank(s).
6. Position of ship at start of discharge.
7. Position of ship on completion of discharge.
8. Ship's speed(s) during discharge.
9. Method of discharge:
   - .1 Through 100 ppm equipment;
   - .2 Through 15 ppm equipment;
   - .3 To reception facilities.
10. Quantity discharged.

(C) *DISPOSAL OF OIL RESIDUES (SLUDGE)*

11. Quantity of residue retained on board for disposal.
12. Methods of disposal of residue:
   - .1 To reception facilities (identify port);
   - .2 Mixed with bunkers;
   - .3 Transferred to another (other) tank(s) (identify tank(s));
   - .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.
14. Time of discharge.

15. Method of discharge or disposal:

.1 Through 100 ppm equipment;

.2 Through 15 ppm equipment;

.3 To reception facilities (identify port);

.4 To slop or collecting tank (identify tank).

(E) *AUTOMATIC DISCHARGE OVERBOARD OR DISPOSAL OTHERWISE OF BILGE WATER WHICH HAS ACCUMULATED IN MACHINERY SPACES*

16. Time when the system has been put into automatic mode of operation for discharge overboard.

17. Time when the system has been put into automatic mode of operation for transfer of bilge water to collecting (slop) tank (identify tank).

18. Time when the system has been put to manual operation.

19. Method of discharge overboard:

.1 Through 100 ppm equipment;

.2 Through 15 ppm equipment.

(F) *CONDITION OF OIL DISCHARGE MONITORING AND CONTROL SYSTEM*

20. Time of system failure.

21. Time when system has been made operational.

22. Reasons for failure.

(G) *ACCIDENTAL OR OTHER EXCEPTIONAL DISCHARGES OF OIL*

23. Time of occurrence.

24. Place or position of ship at time of occurrence.

25. Approximate quantity and type of oil.

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

(H) *ADDITIONAL OPERATIONAL PROCEDURES AND GENERAL REMARKS*

NAME OF SHIP: .....

DISTINCTIVE NUMBER
OR LETTERS: .....

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

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge

Signature of Master .....

* Delete as appropriate.

OIL RECORD BOOK

Part II — Cargo/ballast operations

(Oil tankers)

Name of ship:

Distinctive number
or letters:

Gross tonnage:

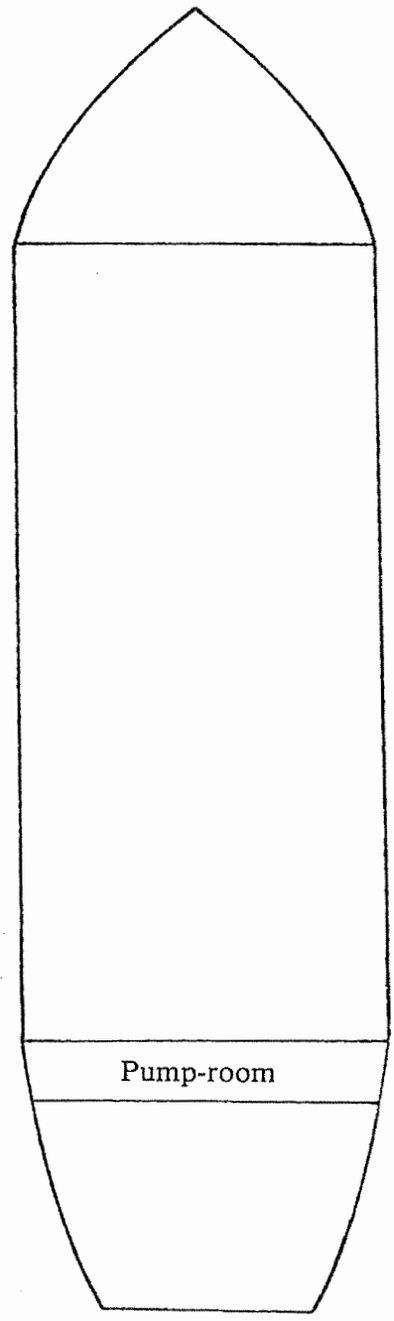
Period from: to:

Note: Every oil tanker of 150 tons gross tonnage and above shall be provided with Oil Record Book Part 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 the 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 in accordance with Regulation 20 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78). The items have been grouped into operational sections, each of which is denoted by a letter code.

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

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

---

* 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.

(B) *INTERNAL TRANSFER OF OIL CARGO DURING VOYAGE*

4. Identity of tank(s):
   .1 From:
   .2 To:
5. Was (were) tank(s) in 4(1) emptied?

(C) *UNLOADING OF OIL CARGO*

6. Place of unloading.
7. Identity of tank(s) unloaded.
8. Was (were) tank(s) emptied?

(D) *CRUDE OIL WASHING (COW TANKERS ONLY)*

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

9. Port where crude oil washing was carried out or ship's position if carried out between two discharge ports.
10. Identity of tank(s) washed.[1]
11. Number of machines in use.
12. Time of start of washing.
13. Washing pattern employed.[2]
14. Washing line pressure.
15. Time completed or stopped washing.

---

[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.

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

17. Remarks.[3]

(E) *BALLASTING OF CARGO TANKS*

18. Identity of tank(s) ballasted.

19. Position of ship at start of ballasting.

(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 oily water resulting from line flushing transferred to slop tanks (identify slop tank(s)).

24. Position of ship when additional ballast water was taken to dedicated clean ballast tank(s).

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

26. Quantity of clean ballast taken on board.

(G) *CLEANING OF CARGO TANKS*

27. Identity of tank(s) cleaned.

28. Port or ship's position.

29. Duration of cleaning.

30. Method of cleaning.[4]

31. Tank washings transferred to:

.1 Reception facilities;

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

---

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

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

(H) *DISCHARGE OF DIRTY BALLAST*

32. Identity of tank(s).

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

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

35. Quantity discharged into the sea.

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

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

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

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

40. Discharged to shore reception facilities (identify port if applicable).

(I) *DISCHARGE OF WATER FROM SLOP TANKS INTO THE SEA*

41. Identity of slop tanks.

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

43. Time of settling from last discharge.

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

45. Ullage of total contents at start of discharge.

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

47. Bulk quantity discharged and rate of discharge.

48. Final quantity discharged and rate of discharge.

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

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

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

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

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

54. Confirm that all applicable valves in the ship's piping system have been closed on completion of discharge from the slop tanks.

(J) *DISPOSAL OF RESIDUES AND OILY MIXTURES NOT OTHERWISE DEALT WITH*

55. Identity of tank(s).

56. Quantity disposed of from each tank.

57. Method of disposal:

.1 To reception facilities (identify port);

.2 Mixed with cargo;

.3 Transferred to another tank(s) (identify tank(s));

.4 Other method (state which).

(K) *DISCHARGE OF CLEAN BALLAST CONTAINED IN CARGO TANKS*

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

59. Identity of tank(s) discharged.

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

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

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

(L) *DISCHARGE OF BALLAST FROM DEDICATED CLEAN BALLAST TANKS (CBT TANKERS ONLY)*

63. Identity of tank(s) discharged.

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

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

66. Quantity discharged:

.1 Into the sea; or

.2 To reception facility (identify port).

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

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

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

(M) *CONDITION OF OIL DISCHARGE MONITORING AND CONTROL SYSTEM*

70. Time of system failure.

71. Time when system has been made operational.

72. Reasons for failure.

(N) *ACCIDENTAL OR OTHER EXCEPTIONAL DISCHARGES OF OIL*

73. Time of occurrence.

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

75. Approximate quantity and type of oil.

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

(O) *ADDITIONAL OPERATIONAL PROCEDURES AND GENERAL REMARKS*

TANKERS ENGAGED IN SPECIFIC TRADES

(P) *LOADING OF BALLAST WATER*

77. Identity of tank(s) ballasted.

78. Position of ship when ballasted.

79. Total quantity of ballast loaded in cubic metres.

80. Remarks.

(Q) *RE-ALLOCATION OF BALLAST WATER WITHIN THE SHIP*

81. Reasons for re-allocation.

(R) *BALLAST WATER DISCHARGE TO RECEPTION FACILITY*

82. Port(s) where ballast water was discharged.

83. Name or designation of reception facility.

84. Total quantity of ballast water discharged in cubic metres.

85. Date, signature and stamp of port authority official.

NAME OF SHIP: .....

DISTINCTIVE NUMBER
OR LETTERS: .....

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

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge

Signature of Master .....

* Delete as appropriate."

Resolution MEPC 16(22)

ADOPTION OF AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973 (RELATING TO ANNEX II OF THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973 AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO)

adopted on 5 December 1985

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention of the International Maritime Organization concerning the function of the 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 1973 Convention (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confers 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 at its twenty-second session amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS in accordance with article 16(2)(d) of the 1973 Convention amendments to the Annex of the 1978 Protocol (relating to Annex II 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 5 October 1986 unless prior to this date one third or more of the Parties or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that in accordance with article 16(2)(g)(ii) of the 1973 Convention the amendments shall enter into force on 6 April 1987 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 1978 Protocol certified copies of the present resolution and the text of the amendments contained in the Annex;

5. FURTHER REQUESTS the Secretary-General to transmit to the Members of the Organization which are not Parties to the 1978 Protocol copies of the resolution and its Annex.

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

ANNEX II

REGULATIONS FOR THE CONTROL OF POLLUTION BY NOXIOUS LIQUID SUBSTANCES IN BULK

Regulation 1

Definitions

The following new paragraphs (10) to (14) are added to the existing text:

"(10) '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 may be 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.

(11) '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 may be 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.

(12) '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:

(a) the ship is constructed before 1 July 1986; and

(b) the ship is certified under the Bulk Chemical Code to carry only those products identified by the Code as substances with pollution hazards only.

(13) 'Similar stage of construction' means the stage at which:

(a) construction identifiable with a specific ship begins; and

(b) 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.

Regulation 2

Application

The following new paragraphs (4), (5), and (6) are added to the existing text:

"(4) For ships constructed before 1 July 1986, the provisions of Regulation 5 of this Annex in respect of the requirement to discharge below the waterline and maximum concentration in the wake astern of the ship shall apply as from 1 January 1988.

(5) 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.

(6) The Administration which allows a fitting, material, appliance or apparatus as alternative to that required by this Annex, under paragraph (5) 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."

Regulation 3

Categorization and Listing of Noxious Liquid Substances

In paragraph (1) of the existing text, the phrase "except Regulation 13", is deleted.

Regulation 5

Discharge of Noxious Liquid Substances

In paragraph (1) the existing text of the last sentence before sub-paragraph (a) is replaced by: "Any water subsequently added to the tank may be discharged into the sea when all the following conditions are satisfied:"

In paragraph (5) the existing text of the third sentence is replaced by: "Any water subsequently introduced into the tank shall be regarded as clean and shall not be subject to paragraph (1), (2), (3) or (4) of this Regulation."

In paragraph (7) the existing text of the last sentence before sub-paragraph (a) is replaced by: "Any water subsequently added to the tank may be discharged into the sea when all the following conditions are satisfied:"

In paragraph (8) the existing text of paragraph (a) is replaced by:

"(a) the tank has been prewashed in accordance with the procedure approved by the Administration and based on standards developed by the Organization and the resulting tank washings have been discharged to a reception facility."

In paragraph (10) the third sentence of the existing text is replaced by: "Any water subsequently introduced into the tank shall be regarded as clean and shall not be subject to paragraph (7), (8) or (9) of this Regulation."

The following new Regulation 5A is added to the existing text:

"Regulation 5A

Pumping, Piping and Unloading Arrangements

(1) Every ship constructed on or after 1 July 1986 shall be provided with pumping and piping arrangements to ensure, through testing under favourable pumping conditions, that each tank designated for the carriage of a Category B substance does not retain a quantity of residue in excess of 0.1 cubic metres in the tank's associated piping and in the immediate vicinity of that tank's suction point.

(2)(a) Subject to the provisions of sub-paragraph (b) of this paragraph, every ship constructed before 1 July 1986 shall be provided with pumping and piping arrangements to ensure, through testing under favourable pumping conditions, that each tank designated for the carriage of a Category B substance does not retain a quantity of residue in excess of 0.3 cubic metres in the tank's associated piping and in the immediate vicinity of that tank's suction point.

(b) Until 2 October 1994 ships referred to in sub-paragraph (a) of this paragraph if not in compliance with the requirements of that sub-paragraph shall, as a minimum, be provided with pumping and piping arrangements to ensure, through testing under favourable pumping conditions and surface residue assessment, that each tank designated for the carriage of a Category B substance does not retain a quantity of residue in excess of 1 cubic metre or 1/3000 of the tank capacity in cubic metres, whichever is greater, in that tank and the associated piping.

(3) Every ship constructed on or after 1 July 1986 shall be provided with pumping and piping arrangements to ensure, through testing under favourable pumping conditions, that each tank designated for the carriage of a Category C substance does not retain a quantity of residue in excess of 0.3 cubic metres in the tank's associated piping and in the immediate vicinity of that tank's suction point.

(4)(a) Subject to the provisions of sub-paragraph (b) of this paragraph, every ship constructed before 1 July 1986 shall be provided with pumping and piping arrangements to ensure, through testing under favourable pumping conditions, that each tank designated for the carriage of a Category C substance does not retain a quantity of residue in excess of 0.9 cubic metres in the tank's associated piping and in the immediate vicinity of that tank's suction point.

(b) Until 2 October 1994 the ships referred to in sub-paragraph (a) of this paragraph if not in compliance with the requirements of that sub-paragraph shall as a minimum, be provided with pumping and piping arrangements to ensure, through testing under favourable pumping conditions and surface residue assessment, that each tank designated for the carriage of a Category C substance does not retain a quantity of residue in excess of 3 cubic metres or 1/1000 of the tank capacity in cubic metres, whichever is greater, in that tank and the associated piping.

(5) Pumping conditions referred to in paragraphs (1), (2), (3) and (4) of this Regulation shall be approved by the Administration and based on standards developed by the Organization. Pumping efficiency tests referred to in paragraphs (1), (2), (3) and (4) of this Regulation shall use water as the test medium and shall be approved by the Administration and based on standards developed by the Organization. The residues on cargo tank surfaces, referred to in paragraphs (2)(b) and (4)(b) of this Regulation shall be determined based on standards developed by the Organization.

(6)(a) Subject to the provision of sub-paragraph (b) of this paragraph, the provisions of paragraphs (2) and (4) of this Regulation need not apply to a ship constructed before 1 July 1986 which is engaged in restricted voyages as determined by the Administration between:

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

(ii) ports or terminals of States Parties to the present Convention.

(b) The provisions of sub-paragraph (a) of this paragraph shall only apply to a ship constructed before 1 July 1986 if:

(i) each time a tank containing Category B or C substances or mixtures is to be washed or ballasted, the tank is washed in accordance with a prewash procedure approved by the Administration and based on Standards developed by the Organization and the tank washings are discharged to a reception facility;

(ii) subsequent washings or ballast water are discharged to a reception facility or at sea in accordance with other provisions of this Annex;

(iii) 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;

(iv) 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

(v) the Certificate required under this Annex is endorsed to the effect that the ship is solely engaged in such restricted voyages.

(7) 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 paragraphs (1), (2), (3) and (4) of this Regulation, provided that all of the following conditions are complied with:

(a) the design, construction and equipment of the ship are approved by the Administration, having regard to the service for which it is intended;

(b) any effluent from tank washings which may be carried out before a repair or drydocking is discharged to a reception facility, the adequacy of which is ascertained by the Administration;

(c) the Certificate required under this Annex indicates:

(i) that each cargo tank is certified for the carriage of only one named substance; and

(ii) the particulars of the exemption;

(d) the ship carries a suitable operational manual approved by the Administration; and

(e) 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 7

The existing title of this Regulation is replaced by "Reception Facilities and Cargo Unloading Terminal Arrangements"

The following new paragraph (3) is added to the existing text:

"(3) 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."

The existing text of paragraph (3) is renumbered as (4) and replaced by the following:

"(4) 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."

The existing text of Regulation 8 is replaced by the following:

"Regulation 8

Measures of Control

(1)(a) 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.

(b) The master of a ship carrying noxious liquid substances in bulk shall ensure that the provisions of Regulation 5 and this Regulation have been complied with and that the Cargo Record Book is completed in accordance with Regulation 9 of this Annex whenever operations as referred to in that Regulation take place.

(c) An exemption referred to in paragraph (2)(b), (5)(b), (6)(c) or (7)(c) 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 sub-paragraph (a) of this paragraph.

Category A substances in all areas

(2) With respect to Category A substances the following provisions shall apply in all areas:

(a) A tank which has been unloaded shall, subject to the provisions of sub-paragraph (b) of this paragraph, be washed in accordance with the requirements of paragraph (3) or (4) of this Regulation before the ship leaves the port of unloading.

(b) At the request of the ship's master, the Government of the receiving Party may exempt the ship from the requirements referred to in sub-paragraph (a) of this paragraph, where it is satisfied that:

(i) the tank unloaded 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

(ii) the tank unloaded is neither washed nor ballasted at sea and the provisions of paragraph (3) or (4) of this Regulation are complied with 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

(iii) the cargo residues will be removed by a ventilation procedure approved by the Administration and based on standards developed by the Organization.

(3) If the tank is to be washed in accordance with sub-paragraph (2)(a) of this Regulation, the effluent from the tank washing operation shall be discharged to a reception facility at least until the concentration of the substance in the discharge, as indicated by analyses of samples of the effluent taken by the surveyor, has fallen to the residual concentration specified for that substance in Appendix II to this Annex. When the required residual concentration 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 under paragraph (1)(a) of this Regulation.

(4) 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 paragraph (3) of this Regulation provided that:

(a) The tank is prewashed in accordance with a procedure approved by the Administration and based on standards developed by the Organization; and

(b) The surveyor referred to under paragraph (1)(a) certifies in the Cargo Record Book that:

(i) the tank, its pump and piping systems have been emptied; and

(ii) the prewash has been carried out in accordance with the prewash procedure approved by the Administration for that tank and that substance; and

(iii) the tank washings resulting from such prewash have been discharged to a reception facility and the tank is empty.

Category B and C substances outside Special Areas

(5) With respect to Category B and C substances, the following provisions shall apply outside Special Areas:

(a) A tank which has been unloaded shall, subject to the provisions of sub-paragraph (b) of this paragraph, be prewashed before the ship leaves the port of unloading, whenever:

(i) the substance unloaded is identified in the standards developed by the Organization as resulting in a residue quantity exceeding the maximum quantity which may be discharged into the sea under Regulation 5(2) or (3) of this Annex in case of Category B or C substances respectively; or

(ii) the unloading is not carried out in accordance with the pumping conditions for the tank approved by the Administration and based on standards developed by the Organization as referred to under Regulation 5A(5) of this Annex, unless alternative measures are taken to the satisfaction of the surveyor referred to in paragraph (1)(a) of this Regulation, to remove the cargo residues from the ship to quantities specified in Regulation 5A of this Annex as applicable.

The prewash procedure used shall be approved by the Administration and based on standards developed by the Organization and the resulting tank washings shall be discharged to a reception facility at the port of unloading.

(b) At the request of the ship's master, the Government of the receiving party may exempt the ship from the requirements of sub-paragraph (a) of this paragraph, where it is satisfied that:

(i) the tank unloaded is to be reloaded with the same substance or another substance compatible with the previous one and that the tank will not be washed nor ballasted prior to loading; or

(ii) the tank unloaded is neither washed nor ballasted at sea and the tank is prewashed in accordance with a procedure approved by the Administration and based on standards developed by the Organization and resulting tank washings are discharged to a reception facility at another port, provided that it has been confirmed in writing that a reception facility at that port is available and adequate for such a purpose; or

(iii) the cargo residues will be removed by a ventilation procedure approved by the Administration and based on standards developed by the Organization.

Category B substances within Special Areas

(6) With respect to Category B substances, the following provisions shall apply within Special Areas.

(a) A tank which has been unloaded shall, subject to the provisions of sub-paragraph (b) and (c), be prewashed before the ship leaves the port of unloading. The prewash procedure used shall be approved by the Administration and based on standards developed by the Organization and the resulting tank washings shall be discharged to a reception facility at the port of unloading.

(b) The requirements of sub-paragraph (a) of this paragraph do not apply when all the following conditions are satisfied:

(i) the Category B substance unloaded is identified in the standards developed by the Organization as resulting in a residue quantity not exceeding the maximum quantity which may be discharged into the sea outside Special Areas under Regulation 5(2) of this Annex, and the residues are retained on board for subsequent discharge into the sea outside the Special Area in compliance with Regulation 5(2) of this Annex; and

(ii) the unloading is carried out in accordance with the pumping conditions for the tank approved by the Administration and based on standards developed by the Organization as referred to under Regulation 5A(5) of this Annex, or failing to comply with the approved pumping conditions, alternative measures are taken to the satisfaction of the surveyor referred to in paragraph (1)(a) of this Regulation, to remove the cargo residues from the ship to quantities specified in Regulation 5A of this Annex as applicable.

(c) At the request of the ship's master, the Government of the receiving party may exempt the ship from the requirements of sub-paragraph (a) of this paragraph, where it is satisfied that:

(i) the tank unloaded 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

(ii) the tank unloaded is neither washed nor ballasted at sea and the tank is prewashed in accordance with a procedure approved by the Administration and based on standards developed by the Organization and resulting tank washings are discharged to a reception facility at another port, provided that it has been confirmed in writing that a reception facility at that port is available and adequate for such a purpose; or

(iii) the cargo residues will be removed by a ventilation procedure approved by the Administration and based on standards developed by the Organization.

Category C substances within Special Areas

(7) With respect to Category C substances, the following provisions shall apply within Special Areas:

(a) A tank which has been unloaded shall, subject to the provisions of sub-paragraphs (b) and (c) of this paragraph, be prewashed before the ship leaves the port of unloading, whenever:

(i) the Category C substance unloaded is identified in the standards developed by the Organization as resulting in a residue quantity exceeding the maximum quantity which may be discharged into the sea under Regulation 5(9) of this Annex; or

(ii) the unloading is not carried out in accordance with the pumping conditions for the tank approved by the Administration and based on standards developed by the Organization as referred to under Regulation 5A(5) of this Annex, unless alternative measures are taken to the satisfaction of the surveyor referred to in paragraph (1)(a) of this Regulation, to remove the cargo residues from the ship to quantities specified in Regulation 5A of this Annex as applicable.

The prewash procedure used shall be approved by the Administration and based on standards developed by the Organization and the resulting tank washings shall be discharged to a reception facility at the port of unloading.

(b) The requirements of sub-paragraph (a) of this paragraph do not apply when all the following conditions are satisfied:

(i) the Category C substance unloaded is identified in the standards developed by the Organization as resulting in a residue quantity not exceeding the maximum quantity which may be discharged into the sea outside Special Areas under Regulation 5(3) of this Annex, and the residues are retained on board for subsequent discharge into the sea outside the Special Area in compliance with Regulation 5(3) of this Annex; and

(ii) the unloading is carried out in accordance with the pumping conditions for the tank approved by the Administration and based on standards developed by the Organization as referred to under Regulation 5A(5) of this Annex, or failing to comply with the approved pumping conditions, alternative measures are taken to the satisfaction of the surveyor referred to in paragraph (1)(a) of this Regulation, to remove the cargo residues from the ship to quantities specified in Regulation 5A of this Annex as applicable.

(c) At the request of the ship's master, the Government of the receiving party may exempt the ship from the requirements of sub-paragraph (a) of this paragraph, where it is satisfied that:

(i) the tank unloaded 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

(ii) the tank unloaded is neither washed nor ballasted at sea and the tank is prewashed in accordance with a procedure approved by the Administration and based on standards developed by the Organization and resulting tank washings are discharged to a reception facility at another port, provided that it has been confirmed in writing that a reception facility at that port is available and adequate for such a purpose; or

(iii) the cargo residues will be removed by a ventilation procedure approved by the Administration and based on standards developed by the Organization.

Category D substances in all areas

(8) With respect to Category D substances, a tank which has been unloaded shall either be washed and the resulting tank washings shall be discharged to a reception facility, or the remaining residues in the tank shall be diluted and discharged into the sea in accordance with Regulation 5(4) of this Annex.

Discharge from a slop tank

(9) Any residues retained on board in a slop tank, including those from cargo pump room bilges, which contain a Category A substance, or within a special area either a Category A or a Category B substance, shall be discharged to a reception facility in accordance with the provisions of Regulation 5(1), (7) or (8) of this Annex, whichever is applicable."

Regulation 9

Cargo Record Book

The existing text of sub-paragraph (2)(i) to (ix) is replaced by the following:

"(i) loading of cargo;
(ii) internal transfer of cargo;
(iii) unloading of cargo;
(iv) cleaning of cargo tanks;
(v) ballasting of cargo tanks;
(vi) discharge of ballast from cargo tanks;
(vii) disposal of residues to reception facilities;
(viii) discharge into the sea or removal by ventilation of residues in accordance with Regulation 5 of this Annex."

In the existing text of paragraph (3), reference to "Article 7" is replaced by "Article 8".

In the second sentence of the existing text of paragraph (5), the words "when the ship is manned" are deleted.

In the third sentence of the existing text of paragraph (5), "(1973)" is deleted and the words "or a Certificate referred to in Regulation 12A of this Annex" are inserted.

In the second sentence of the existing text of paragraph (6), the word "two" is replaced by the word "three".

The existing texts of Regulations 10 to 12 is replaced by the following:

"Regulation 10

Surveys

(1) Ships carrying noxious liquid substances in bulk shall be subject to the surveys specified below:

(a) An initial survey before the ship is put in service or before the Certificate required under Regulation 11 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.

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

(c) A minimum of one intermediate survey during the period of validity of the Certificate and which 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. In cases where only one such intermediate survey is carried out in any one Certificate validity period, it shall be held not before six months prior to, nor later than six months after the half-way date of the Certificate's period of validity. Such intermediate surveys shall be endorsed on the Certificate issued under Regulation 11 of this Annex.

(d) An annual survey within 3 months before or after the day and the month of the date of issue of the Certificate and which shall include a general examination to ensure that the structure, fittings, arrangements and materials remain in all respects satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed on the Certificate issued under Regulation 11 of this Annex.

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

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

(i) require repairs to a ship; and

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

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

(c) When a nominated surveyor or recognized organization determines that the condition of the ship or its equipment does not correspond substantially with the particulars of the Certificate, or is such that the ship is not fit to proceed to sea without presenting an unreasonable threat of harm to the marine environment, such surveyor or organization shall immediately ensure that corrective action is taken and shall in

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

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

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

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

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

Regulation 11

Issue of Certificate

(1) An International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk shall be issued, after survey in accordance with the provisions of Regulation 10 of this Annex, to any ship carrying 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 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) (a) 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 in accordance with this Annex.

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

(c) 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.

(d) 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 an official language of the issuing country in the form corresponding to the model given in Appendix V to this Annex. If the language used is neither English nor French, the text shall include a translation into one of these languages.

Regulation 12

Duration 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 five years from the date of issue.

(2) A Certificate shall cease to be valid if significant alterations have taken place in the construction, equipment, systems, fittings, arrangements or material required without the sanction of the Administration, except the direct replacement of such equipment or fittings, or if intermediate or annual surveys as specified by the Administration under Regulation 10(1)(c) or (d) of this Annex are not carried out.

(3) A Certificate issued to a ship shall also cease to be valid upon transfer of the ship to the flag of another State. A new Certificate shall be issued only when the Government issuing the new Certificate is fully satisfied that the ship is in full compliance with the requirements of Regulation 10(3)(a) and (b) of this Annex. In the case of a transfer between Parties, if requested within three months after the transfer has taken place, the Government of the Party whose flag the ship was formerly entitled to fly shall transmit as soon as possible to the Administration a copy of the Certificate carried by the ship before the transfer and, if available, a copy of the relevant survey report."

The following new Regulation 12A is added to the existing text:

"Regulation 12A

Survey and Certification of Chemical Tankers

Notwithstanding the provisions of Regulations 10, 11 and 12 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 11 of this Annex."

Regulation 13

Requirements for Minimizing Accidental Pollution

The existing text of Regulation 13 is replaced by the following:

"(1) The design, construction, equipment and operation of ships carrying noxious liquid substances of Category A, B or C in bulk, shall be such as to minimize the uncontrolled discharge into the sea of such substances.

(2) Chemical tankers constructed on or after 1 July 1986 shall comply with the requirements of the International Bulk Chemical Code.

(3) Chemical tankers constructed before 1 July 1986 shall comply with the following requirements:

(a) The following chemical tankers shall comply with the requirements of the Bulk Chemical Code as applicable to ships referred to in 1.7.2 of that Code:

(i) ships for which the building contract is placed on or after 2 November 1973 and which are engaged on voyages to ports or terminals under the jurisdiction of other States Parties to the Convention; and

(ii) ships constructed on or after 1 July 1983 which are engaged solely on voyages between ports or terminals within the State the flag of which the ship is entitled to fly;

(b) The following chemical tankers shall comply with the requirements of the Bulk Chemical Code as applicable to ships referred to in 1.7.3 of that Code:

(i) 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

(ii) ships constructed before 1 July 1983 which are engaged on voyages between ports or terminals within the State the flag of which the ship is entitled to fly, except that for ships of less than 1,600 tons gross tonnage compliance with the Code in respect of construction and equipment shall take effect not later than 1 July 1994.

(4) In respect of ships other than chemical tankers carrying noxious liquid substances of Category A, B or C in bulk, the Administration shall establish appropriate measures based on the Guidelines developed by the Organization in order to ensure that the provisions of paragraph (1) of this Regulation are complied with."

The following new Regulation 14 is added to the existing text:

"Regulation 14

Carriage and Discharge of Oil-like Substances

Notwithstanding the provisions of other Regulations of this Annex, noxious liquid substances designated in Appendix II of this Annex as falling under Category C or D and identified by the Organization as oil-like substances under the criteria developed by the Organization, may be carried on an oil tanker as defined in Annex I of the Convention and discharged in accordance with the provisions of Annex I of the present Convention, provided that all of the following conditions are complied with:

(a) the ship complies with the provisions of Annex I of the present Convention as applicable to product carriers as defined in that Annex;

(b) the ship carries an International Oil Pollution Prevention Certificate and its Supplement B and the Certificate is endorsed to indicate that the ship may carry oil-like substances in conformity with this Regulation and the endorsement includes a list of oil-like substances the ship is allowed to carry;

(c) in the case of Category C substances the ship complies with the ship type 3 damage stability requirements of:

(i) the International Bulk Chemical Code in the case of a ship constructed on or after 1 July 1986; or

(ii) the Bulk Chemical Code, as applicable under Regulation 13 of this Annex, in the case of a ship constructed before 1 July 1986; and

(d) the oil content meter in the oil discharge monitoring and control system of the ship is approved by the Administration for use in monitoring the oil-like substances to be carried."

APPENDIX II

LIST OF NOXIOUS LIQUID SUBSTANCES CARRIED IN BULK

Existing list is replaced by the following:

Substance	UN Number	Pollution Category for operational discharge (Regulation 3 of Annex II)	Residual concentration (per cent by weight) (Regulation 5(1)) of Annex II)	Regulation 5(7) of Annex II)
	I	II	III Outside special areas	IV Within special areas
Acetaldehyde	1089	C		
Acetic acid	2789* 2790*	C		
Acetic anhydride	1715	C		
Acetone cyanohydrin	1541	A	0.1	0.05
Acetophenone		D		
Acetyl chloride	1717	C		
Acrylamide solution (50% or less)	2074	D		
Acrylic acid	2218	D		
Acrylonitrile	1093	B		
Adiponitrile	2205	D		

Pollution Category in brackets indicates that the substance has been provisionally included in this list and that further data are necessary in order to complete the evaluation of its environmental hazards, particularly in relation to living resources. Until the hazard evaluation is completed the Pollution Category assigned shall be used.

* UN Number 2789 refers to more than 80% solution and 2790 between 10% and 80% solution.

	I	II	III	IV
Alcohols, C_4, C_5, C_6 mixtures		D		
Alcohols, C_5, C_6 as individual alcohols		D		
Alcohols C_7, C_8, C_9 as individuals and mixtures		C		
Alcohols C_{10}, C_{11}, C_{12} as individuals and mixtures		B		
Alcohol ethoxylate (higher secondary)		D		
Alcohol (C_{13}/C_{15}) poly(3-11)ethoxylates		B		
Alkyl acrylate vinyl pyridine copolymer in toluene		(C)		
Alkylamine mixtures		C		
Alkyl (C_9-C_{17}) benzene mixtures (straight or branched chain)		D		
Alkyl benzene sulphonate (branched chain)		B		
Alkyl benzene sulphonate (straight chain)		C		
Alkyl benzene sulphonic acid	2584 2586	C		
Allyl alcohol	1098	B		
Allyl chloride	1100	B		
2-(2-Aminoethoxy)ethanol	3055	D		
Aminoethylethanolamine		(D)		
N-Aminoethylpiperazine	2815	D		
Ammonia aqueous (28% or less)	2672*	C		

* UN number refers to 10-35%

	I	II	III	IV
Ammonium nitrate solution (93% or less)	2426	D		
Ammonium sulphate solution		D		
Ammonium sulphide solution (45% or less)	2683	B		
Amyl acetate, commercial	1104	C		
n-Amyl acetate	1104	C		
sec-Amyl acetate	1104	C		
n-Amyl alcohol	1105	D		
sec-Amyl alcohol	1105	D		
Amyl alcohol, primary	1105	D		
Aniline	1547	C		
Benzaldehyde		C		
Benzene and mixtures having 10% benzene or more	1114*	C		
Benzene sulphonyl chloride	2225	D		
Benzyl acetate		C		
Benzyl alcohol		C		
Benzyl chloride	1738	B		
Butene oligomer		D		
n-Butyl acetate	1123	C		
sec-Butyl acetate	1123	D		
n-Butyl acrylate	2348	D		
Butylamine (all isomers)	1125 (normal) 1214 (iso)	C		

* UN number 1114 applies to Benzene

	I	II	III	IV
Butyl benzyl phthalate		A	0.1	0.05
n-Butyl butyrate		(B)		
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture		D		
Butylene glycol		D		
1,2-Butylene oxide	3022	C		
n-Butyl ether	1149	C		
Butyl lactate		D		
Butyl methacrylate		D		
n-Butyraldehyde	1129	B		
Butyric acid	2820	B		
gamma-Butyrolactone		D		
Calcium alkyl salicylate		D		
Calcium chloride solution		D		
Calcium hydroxide solution		D		
Calcium hypochlorite solution		B		
Calcium naphthenate in mineral oil		A	0.1	0.05
Camphor oil	1130	B		
Caprolactam		D		
Carbolic oil		A	0.1	0.05
Carbon disulphide	1131	A	0.01	0.005
Carbon tetrachloride	1846	B		

	I	II	III	IV
Cashew nut shell oil (untreated)		D		
Castor oil		D		
Chloroacetic acid	1750	C		
Chloroacetone	1695	C		
Chlorobenzene	1134	B		
Chloroform	1888	B		
1-Chloroheptane		A	0.1	0.05
Chlorohydrins, crude		(D)		
o-Chloronitrobenzene	1578	B		
2-Chloropropionic acid	2511	(C)		
3-Chloropropionic acid		(C)		
Chlorosulphonic acid	1754	C		
m-Chlorotoluene	2238	B		
o-Chlorotoluene	2238	A	0.1	0.05
p-Chlorotoluene	2238	B		
Chlorotoluene (mixed isomers)	2238	A	0.1	0.05
Choline chloride solution		D		
Citric acid		D		
Coal tar naphtha solvent		B		
Cobalt naphthenate in solvent naphtha		A	0.1	0.05
Coconut oil		D		
Coconut oil, fatty acid methyl ester		D		
Cod liver oil		D		

	I	II	III	IV
Corn oil		D		
Cotton seed oil		D		
Creosote (coal tar)		(C)		
Creosote (wood)		A	0.1	0.05
Cresol (mixed isomers)	2076	A	0.1	0.05
Cresyl diphenyl phosphate		A	0.1	0.05
Cresylic acid	2022	A	0.1	0.05
Crotonaldehyde	1143	B		
Cycloheptane	2241	D		
Cyclohexane	1145	C		
Cyclohexane/Cyclohexanol mixture		C		
Cyclohexanol		C		
Cyclohexanone	1915	D		
Cyclohexylamine	2357	C		
p-Cymene	2046	C		
Decahydronaphthalene	1147	(D)		
n-Decaldehyde		B		
Decane		(D)		
Decene		B		
Decyl acrylate		A	0.1	0.05
Decyl alcohol (all isomers)		B		
Diacetone alcohol	1148	D		

	I	II	III	IV
Dialkyl (C_7-C_9) phthalates		(D)		
Dialkyl (C_9-C_{13}) phthalates		D		
Dibenzyl ether		(C)		
Dibutylamine		C		
Dibutyl phthalate		A	0.1	0.05
m-Dichlorobenzene		B		
o-Dichlorobenzene	1591	B		
1,1-Dichloroethane	2362	B		
1,2-Dichloroethylene	1150	(D)		
Dichloroethyl ether	1916	B		
1,6-Dichlorohexane		B		
2,2-Dichloroisopropyl ether	2490	C		
Dichloromethane	1593	D		
2,4-Dichlorophenol	2021	A	0.1	0.05
2,4-Dichlorophenoxy-acetic acid		(A)	0.1	0.05
2,4-Dichlorophenoxy-acetic acid, diethanol-amine salt solution		(A)	0.1	0.05
2,4-Dichlorophenoxy-acetic acid, dimethyl-amine salt (70% or less) solution		(A)	0.1	0.05
2,4-Dichlorophenoxy-acetic acid, triiso-propanolamine salt solution		(A)	0.1	0.05
1,1-Dichloropropane		B		
1,2-Dichloropropane	1279	B		
1,3-Dichloropropane		B		

	I	II	III	IV
1,3-Dichloropropene	2047	B		
Dichloropropene/ Dichloropropane mixtures		B		
2,2-Dichloropropionic acid		D		
Dichloropropyl ether		(B)		
Diethylamine	1154	C		
Diethylaminoethanol	2686	C		
Diethylbenzene	2049	C		
Diethyl carbonate	2366	D		
Diethylene glycol dibutyl ether		D		
Diethylene glycol butyl ether acetate		(D)		
Diethylene glycol ethyl ether acetate		(D)		
Diethylene glycol methyl ether		C		
Diethylene glycol methyl ether acetate		(D)		
Diethylenetriamine	2079	(D)		
Di(2-ethylhexyl) adipate		D		
Di(2-ethylhexyl) phosphoric acid	1902	C		
Di(2-ethylhexyl) phthalate		D		
Diethyl malonate		C		
Diethyl phthalate		C		
Diethyl sulphate	1594	(B)		

	I	II	III	IV
Diglycidyl ether of Bisphenol A		B		
1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution		D		
Diisobutylamine	2361	(C)		
Diisobutylene	2050	B		
Diisobutyl ketone	1157	D		
Diisobutyl phthalate		B		
Diisodecyl phthalate		D		
Diisononyl adipate		(D)		
Diisononyl phthalate		D		
Diisopropanolamine		C		
Diisopropylamine	1158	C		
Diisopropylbenzene (all isomers)		A	0.1	0.05
Diisopropyl naphthalene		D		
Dimethyl acetamide		(B)		
Dimethylamine solution (45% or less)	1160	C		
Dimethylamine solution (greater than 45% but not greater than 55%)	1160	C		
Dimethylamine solution (greater than 55% but not greater than 65%)	1160	C		
N,N-Dimethylcyclohexylamine	2264	C		
Dimethylethanolamine	2051	D		
Dimethylformamide	2265	D		

	I	II	III	IV
Dimethyl phthalate		C		
Dinitrotoluene (molten)	1600	B		
Dinonyl phthalate		D		
1,4-Dioxane	1165	D		
Dipentene	2052	C		
Diphenyl/Diphenyl oxide mixtures		A	0.1	0.05
Diphenyl ether		A	0.1	0.05
Diphenylmethane diisocyanate	2489	(B)		
Diphenyl oxide/Diphenyl phenyl ether mixture		A	0.1	0.05
Di-n-propylamine	2383	C		
Dipropylene glycol methyl ether		(D)		
Ditridecyl phthalate		D		
Diundecyl phthalate		D		
Divinyl acetylene		(D)		
Dodecane		(D)		
Dodecene (all isomers)		B		
Dodecyl alcohol		B		
Dodecylbenzene		C		
Dodecyl diphenyl oxide disulphonate solution		B		
Dodecylphenol		A	0.1	0.05
Epichlorohydrin	2023	C		
Ethanolamine	2491	D		

	I	II	III	IV
2-Ethoxyethanol	1171	D		
2-Ethoxyethyl acetate	1172	C		
Ethyl acetate	1173	D		
Ethyl acetoacetate		(D)		
Ethyl acrylate	1917	B		
Ethylamine	1036	C		
Ethylamine solutions (72% or less)	2270	C		
Ethyl amyl ketone	2271	C		
Ethylbenzene	1175	C		
N-Ethylbutylamine		(C)		
Ethylcyclohexane		D		
N-Ethylcyclohexylamine		D		
Ethylene chlorohydrin	1135	C		
Ethylene cyanohydrin		(D)		
Ethylenediamine	1604	C		
Ethylenediamine, tetraacetic acid, tetrasodium salt solution		D		
Ethylene dibromide	1605	B		
Ethylene dichloride	1184	B		
Ethylene glycol		D		
Ethylene glycol methyl butyl ether		D		
Ethylene glycol acetate		(D)		
Ethylene glycol butyl ether acetate		D		

	I	II	III	IV
Ethylene glycol methyl ether	1188	D		
Ethylene glycol methyl ether acetate	1189	D		
Ethylene glycol phenyl ether		D		
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture		D		
Ethylene oxide/Propylene oxide mixtures with an ethylene oxide content of not more than 30% by weight	2983	D		
2-Ethylhexanoic acid		D		
2-Ethylhexyl acrylate		D		
2-Ethylhexylamine	2276	B		
Ethylidene norbornene		B		
Ethyl lactate	1192	D		
Ethyl methacrylate	2277	(D)		
o-Ethyl phenol		(A)	0.1	0.05
2-Ethyl-3-propylacrolein		B		
Ethyltoluene		(B)		
Fatty alcohols (C_{12}-C_{20})		B		
Ferric chloride solution	2582	C		
Ferric hydroxyethyl ethylenediamine triacetic acid, trisodium salt solution		D		
Fish oil		D		

	I	II	III	IV
Formaldehyde solutions (45% or less)	1198 2209	C		
Formamide		D		
Formic acid	1779	D		
Fumaric adduct of rosin, water dispersion		B		
Furfural	1199	C		
Furfuryl alcohol	2874	C		
Glutaraldehyde solutions (50% or less)		D		
Glycidyl ester of C_{10} tryalkyl acetic acid		B		
Ground nut oil		D		
Heptanoic acid		(D)		
Heptanol (all isomers)		C		
Heptene (mixed isomers)		C		
Heptyl acetate		(B)		
Hexahydrocymene		(C)		
Hexamethylenediamine solution	1783	C		
Hexamethylenediamine adipate (50% in water)		D		
Hexamethyleneimine	2493	C		
1-Hexanol	2282	D		
1-Hexene	2370	C		
Hexyl acetate	1233	B		
Hydrochloric acid	1789	D		
Hydrogen peroxide solutions (over 60% but not over 70%)	2015	C		

	I	II	III	IV
Hydrogen peroxide solutions (over 8% but not over 60%)	2014 2984	C		
2-Hydroxyethyl acrylate		B		
N-(Hydroxyethyl)ethylene diamine triacetic acid, trisodium salt solution		D		
Iron chloride, Copper chloride mixture		A	0.1	0.05
Isoamyl acetate	1104	C		
Isoamyl alcohol	1105	D		
Isobutyl acetate	1213	C		
Isobutyl acrylate	2527	D		
Isobutyl formate	2393	D		
Isobutyl formate/ Isobutanol mixtures		(C)		
Isobutyl methacrylate	2283	D		
Isobutyraldehyde	2045	C		
Isodecaldehyde		C		
Isodecyl acrylate		A	0.1	0.05
Isononanoic acid		D		
Isooctane	1262	(D)		
Isopentane	1265	D		
Isophorone		D		
Isophorone diamine	2289	D		
Isophorone diisocyanate	2290	B		
Isoprene	1218	C		
Isopropanolamine		C		

	I	II	III	IV
Isopropylamine	1221	C		
Isopropylbenzene	1918	B		
Isopropyl cyclohexane		D		
Isopropyl ether	1159	D		
Isovaleraldehyde	2058	C		
Lactic acid		D		
Lactonitrile solution (80% or less)		B		
Latex (ammonia inhibited)		D		
Linseed oil		D		
Maleic anhydride	2215	D		
Mercaptobenzothiazol, sodium salt solution		(B)		
Mesityl oxide	1229	D		
Methacrylic acid	2531	D		
Methacrylic resin in 1,2-Dichloroethane solution		(D)		
Methacrylonitrile		(B)		
Methanethiol		A	0.1	0.05
3-Methoxybutyl acetate	2708	D		
Methyl acrylate	1919	C		
Methylamine solutions (42% or less)	1235	C		
Methylamyl acetate	1233	(C)		
Methylamyl alcohol	2053	(C)		
Methyl amyl ketone	1110	(C)		
Methyl benzoate	2938	B		

	I	II	III	IV
Methyl tert-butyl ether	2398	D		
2-Methyl butyraldehyde		(C)		
4,4'-Methylene dianiline and its higher molecular weight polymers/ o-Dichlorobenzene mixtures		B		
Methylethanolamine		C		3
2-Methyl-6-ethylaniline		C		
Methyl ethyl ketone	1193	D		
2-Methyl-5-ethyl pyridine	2300	(B)		
Methyl formate	1243	D		
Methyl isobutyl ketone	1245	D		
Methyl methacrylate	1247	D		
alpha-Methylnaphthalene		A	0.1	0.05
beta-Methylnaphthalene		(A)	0.1	0.05
Methyl naphthalene		A	0.1	0.05
2-Methyl-1-pentene	2288	C		
Methylpropyl ketone	1249	D		
2-Methylpyridine	2313	B		
4-Methylpyridine	2313	B		
N-Methyl-2-pyrrolidone		B		
Methyl salicylate		(B)		
alpha-Methylstyrene	2303	A	0.1	0.05
Morpholine	2054	D		

	I	II	III	IV
Motor fuel anti-knock compounds	1649	A	0.1	0.05
Naphthalene (molten)	2304	A	0.1	0.05
Naphthenic acids		(A)	0.1	0.05
Neodecanoic acid		(B)		
Nitrating acid (mixture of sulphuric and nitric acids)	1796	(C)		
Nitric acid (less than 70%)	2031	C		
Nitric acid, (70% and over)	2031 2032	C		
Nitrilotriacetic acid, trisodium salt solution		D		
Nitrobenzene	1662	B		
Nitroethane	2842	(D)		
Nitromethane	1261	(D)		
o-Nitrophenol (molten)	1663	B		
1- or 2-Nitropropane	2608	D		
Nitropropane (60%)/ Nitroethane (40%) mixture	1993	D		
Nitrotoluenes	1664	C		
Nonane	1920	(D)		
Nonanoic acid		D		
Nonene		B		
Nonyl alcohol		C		
Nonylphenol		A	0.1	0.05

	I	II	III	IV
Nonylphenol poly(4-12) ethoxylates		B		
9,12-Octadecadienoic acid (Linoleic acid)		D		
9,12,15-Octadecatrienoic acid (Linolenic acid)		D		
Octane	1262	(D)		
Octanol (all isomers)		C		
Octene (all isomers)		B		
n-Octyl acetate		(D)		
Octyl decyl phthalate		D		
Olefins, straight chain, mixtures		B		
Olefins (C_6-C_8 mixtures)		B		
alpha-Olefins (C_6-C_{18} mixtures)		B		
Oleic acid		(D)		
Oleum	1831	C		
Olive oil		D		
Oxalic acid (10-25%)		D		
Palm nut oil		D		
Palm oil		D		
Palm oil, methyl ester		D		
Palm stearin		D		
n-Paraffins (C_{10}-C_{20})		(D)		
Paraldehyde	1264	C		
Pentachloroethane	1669	B		

	I	II	III	IV
1,3-Pentadiene		C		
Pentaethylenehexamine/ Tetraethylenepentamine mixture		D		
n-Pentane	1265	C		
1-Pentanol	1105	D		
2-Pentanol	1105	(D)		
3-Pentanol	1105	(D)		
Pentene (all isomers)		C		
Perchloroethylene	1897	B		
Phenol	2312	B		
1-Phenyl-1-xylyl ethane		C		
Phosphoric acid	1805	D		
Phosphorus, yellow or white	2447	A	0.01	0.005
Phosphorus oxychloride	1810	D		
Phosphorus trichloride	1809	D		
Phthalic anhydride	2214	C		
Pinene	2368	A	0.1	0.05
Polyalkylene glycol butyl ether		(D)		
Polyethylene polyamines	2734 2735	(C)		
Polymethylene polyphenyl isocyanate	2206 2207	D		
Polypropylene glycols		D		
Potassium hydroxide solution	1814	C		
Potassium silicate solution		(D)		

	I	II	III	IV
n-Propanolamine		C		
beta-Propiolactone		D		
Propionaldehyde	1275	D		
Propionic acid	1848	D		
Propionic anhydride	2496	C		
Propionitrile	2404	C		
n-Propyl acetate	1276	D		
n-Propyl alcohol	1274	D		
n-Propylamine	1277	C		
n-Propyl benzene	2364	(C)		
n-Propyl chloride	1278	B		
Propylene dimer		(C)		
Propylene glycol ethyl ether		(D)		
Propylene glycol methyl ether		(D)		
Propylene oxide	1280	D		
Propylene trimer	2057	B		
Pyridine	1282	B		
Rape seed oil		D		
Rice bran oil		D		
Rosin		A	0.1	0.05
Rosin soap (disproportionated) solution		B		
Safflower oil		D		
Sesame oil		D		

	I	II	III	IV
Silicon tetrachloride	1818	D		
Sodium aluminate solution	1819	C		
Sodium borohydride (15% or less)/Sodium hydroxide solution		C		
Sodium dichromate solution (70% or less)		B		
Sodium hydrogen sulphite solution	2693	D		
Sodium hydrosulphide solution (45% or less)	2949	B		
Sodium hydrosulphide/ Ammonium sulphide solution		B		
Sodium hydroxide solution	1824	D		
Sodium hypochlorite solution (15% or less)	1791	B		
Sodium nitrite solution	1577	B		
Sodium silicate solution		D		
Sodium sulphide solution	1849	B		
Sodium sulphite solution		(C)		
Soya bean oil		D		
Sperm oil		D		
Styrene monomer	2055	B		
Sulphuric acid	1830	C		
Sulphuric acid, spent	1832	C		
Sulphurous acid	1833	(C)		
Sunflower oil		D		

	I	II	III	IV
Tall oil, crude and distilled		A	0.1	0.05
Tall oil fatty acid (resin acids less than 20%)		(C)		
Tall oil soap (disproportionated) solution		B		
Tallow		D		
Tannic acid		C		
Tetrachloroethane	1702	B		
Tetraethylenepentamine	2320	D		
Tetrahydrofuran	2056	D		
Tetrahydronaphthalene		C		
1,2,3,5-Tetramethyl benzene		(C)		
Titanium tetrachloride	1838	D		
Toluene	1294	C		
Toluenediamine	1709	C		
Toluene diisocyanate	2078	C		
o-Toluidine	1708	C		
Tributyl phosphate		B		
1,2,4-Trichlorobenzene	2321	B		
1,1,1-Trichloroethane	2831	B		
1,1,2-Trichloroethane		B		
Trichloroethylene	1710	B		
1,2,3-Trichloropropane		B		
1,1,2-Trichloro-1,2,2-trifluoroethane		C		

	I	II	III	IV
Tricresyl phosphate (containing less than 1% ortho-isomer)		A	0.1	0.05
Tricresyl phosphate (containing 1% or more ortho-isomer)	2574*	A	0.1	0.05
Triethanolamine		D		
Triethylamine	1296	C		
Triethylbenzene		A	0.1	0.05
Triethylene glycol methyl ether		(D)		
Triethylenetetramine	2259	D		
Triethyl phosphate		D		
Triisopropanolamine		D		
Trimethylacetic acid		D		
Trimethylamine		C		
1,2,3-Trimethylbenzene		(B)		
1,2,4-Trimethylbenzene		B		
1,3,5-Trimethylbenzene	2325	(B)		
Trimethylhexamethylene diamine (2,2,4- and 2,4,4- isomers)	2327	D		
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4- isomers)	2328	B		
Trimethylol propane polyethoxylate		D		

* UN number 2574 applies to Tricresyl phosphate containing more than 3% ortho-isomer.

	I	II	III	IV
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate		C		
Tripropylene glycol methyl ether		(D)		
Trixylyl phosphate		A	0.1	0.05
Tung oil		D		
Turpentine	1299	B		
Undecane	2330	(D)		
1-Undecene		B		
Undecyl alcohol		B		
Urea, Ammonium nitrate solution		D		
Urea, Ammonium phosphate solution		D		
Urea, Ammonium solution (containing aqua Ammonia)		C		
n-Valeraldehyde	2058	D		
Vinyl acetate	1301	C		
Vinyl ethyl ether	1302	C		
Vinylidene chloride	1303	B		
Vinyl neodecanoate		C		
Vinyl toluene	2618	A	0.1	0.05
White spirit, low (15-20%) aromatic	1300	(B)		
Xylene	1307	C		
Xylenol	2261	B		

APPENDIX III

LIST OF OTHER LIQUID SUBSTANCES

Existing list is replaced by the following:

Substance	UN Number
Acetone	1090
Acetonitrile	1648
Alcohols, C_1, C_2, C_3 as individuals and mixtures	
Alcohols, C_4	
Alcohols, C_{13} and above as individuals and mixtures	
Alum (15% solution)	
tert-Amyl alcohol	1105
n-Butyl alcohol	1120
sec-Butyl alcohol	1120
tert-Butyl alcohol	1120
Butyl stearate	
Calcium bromide solution	
Cetyl/Eicosyl methacrylate mixture	
Citric juice	
Dextrose solution	
Dibutyl sebacate	
Dicyclopentadiene	2048
Diethanolamine	
Diethylene glycol	
Diethylene glycol diethyl ether	
Diethylene glycol butyl ether	
Diethylene glycol ethyl ether	

Substance	UN Number
Diethylenetriamine pentaacetic acid, pentasodium salt solution	
Diethyl ether	1155
Diethyl ketone	1156
Diheptyl phthalate	
Dihexyl phthalate	
Diisooctyl phthalate	
Dioctyl phthalate	
Dipropylene glycol	
Dodecyl methacrylate	
Dodecyl/Pentadecyl methacrylate mixture	
Ethyl alcohol	1170
Ethylene carbonate	
Ethylene glycol butyl ether	2369
Ethylene glycol tertiary butyl ether	
Ethylene-vinylacetate copolymer (emulsion)	
Glycerin	
Glycine sodium salt solution	
1-Heptadecene	
n-Heptane	1206
1-Hexadecene	
n-Hexane	1208
Hexylene glycol	
Isobutyl alcohol	1212
Isopropyl acetate	1220
Isopropyl alcohol	1219
Lard	

Substance	UN Number
Latex (carboxylated styrene/butadiene copolymer)	
Lignin sulphonic acid, salt (low COD) solution	
Magnesium chloride solution	
Magnesium hydroxide slurry	
3-Methoxy-1-butanol	
Methyl acetate	1231
Methyl alcohol	1230
2-Methyl-2-hydroxy-3-butyne	
3-Methyl-3-methoxy butanol	
3-Methyl-3-methoxy butyl acetate	
2-Methylpentane*	1208
Milk	
Molasses	
1-Octadecanol	
Olefins (C_{13} and above, all isomers)	
Paraffin wax	
1-Pentadecene	
Petroleum spirit	1271
Polyaluminium chloride solution	
Polybutene	
Polyethylene glycols	
Polyethylene glycol dimethyl ether	

* Asterisk indicates that the substance has been provisionally included in this list and that further data are necessary in order to complete the evaluation of its environmental hazards, particularly in relation to living resources.

Substance	UN Number
Polypropylene glycol methyl ether	
Polysiloxane	
1,2-Propylene glycol	
Propylene tetramer	2850
Sodium alumino silicate slurry	
Sodium chlorate solution (50% or less)	2428
Sodium salicylate	
Sorbitol	
Sulpholane*	
Sulphur (molten)	2448
1-Tetradecanol	
Tetradecene	
Tridecanol	
Tridecene	
Triethylene glycol	
Triethylene glycol butyl ether	
Triisobutylene	2324
Tripropylene glycol	
Urea solution	
Urea resin solution	
Vegetable protein solution (hydrolyzed)	
Wine	

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* Asterisk indicates that the substance has been provisionally included in this list and that further data are necessary in order to complete the evaluation of its environmental hazards, particularly in relation to living resources.

APPENDIX IV

CARGO RECORD BOOK FOR SHIPS CARRYING
NOXIOUS LIQUID SUBSTANCES IN BULK

The existing Appendix IV is replaced by the following:

"Appendix IV

FORM OF CARGO RECORD BOOK

CARGO RECORD BOOK FOR SHIPS CARRYING
NOXIOUS LIQUID SUBSTANCES IN BULK

Name of ship :

Distinctive number
or letters :

Gross tonnage :

Period from: to:

Note: Every ship carrying noxious liquid substances in bulk shall be provided with a Cargo Record Book to record relevant cargo/ballast operations.

NAME OF SHIP: .....

DISTINCTIVE NUMBER
OR LETTERS: .....

PLAN VIEW OF CARGO AND SLOP TANKS
(to be completed on board)

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 paragraph 2 of Regulation 9 of Annex II of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, 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.

Entries in the Cargo Record Book are required only for operations involving Categories A, B, C and D substances.

LIST OF ITEMS TO BE RECORDED

Entries are required only for operations involving Categories A, B, C and D 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 washing 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 Dilution of cargo residues with water, state how much water used (only Category D substances).

.4 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?

.2 Were tank washing(s) discharged from a slops collecting tank. If so, state quantity and rate of discharge.

18. Time commenced and stopped pumping.

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 commenced and stopped ballast discharge.

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 ships's Procedures and Arrangements Manual been carried out?

33. Have tank washings resulting from the prewash been discharged ashore and is the tank empty?

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: .....

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 V

FORM OF CERTIFICATE

The existing form of the Certificate is replaced by the following:

"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 official designation of the country)

by

.....

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

Name of ship	Distinctive number or letters	Port of registry	Gross tonnage

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with the provisions of Regulation 10 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 manual in accordance with the standards for procedures and arrangements as called for by Regulation 5, 5A and 8 of Annex II of the Convention, and that the arrangements and equipment of the ship prescribed in the manual are in all respects satisfactory and comply with the applicable requirements of the said Standards.

4 That the ship is suitable for the carriage in bulk of the following noxious liquid substances, provided that all relevant operational provisions of Annex II of the Convention are observed.

Noxious liquid substances	Conditions of carriage (tank numbers etc.)
*Continued on additional signed and dated sheets	

---

* Delete as necessary

This certificate is valid, until .....
subject to surveys in accordance with Regulation 10 of Annex II of the Convention

Issued at .....
(place of issue of Certificate)

..... 19.. .....
(Date of issue) (Signature of duly authorized official issuing the Certificate)

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

ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that at a survey required by Regulation 10 of Annex II 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: .....

(seal or stamp of the Authority, as appropriate)

Annual*/Intermediate* survey:

Signed: .....
(signature of duly authorized official)

Place: .....

Date: .....

(seal or stamp of the Authority, as appropriate)

Annual*/Intermediate* survey:

Signed: .....
(signature of duly authorized official)

Place: .....

Date: .....

(seal 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)

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* Delete as appropriate

Resolution MEPC 21(22)

ADOPTION OF AMENDMENTS TO THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973 (RELATING TO PROTOCOL I TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973 AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO)

adopted on 5 December 1985

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention of the International Maritime Organization concerning the function of the 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 1973 Convention (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confers 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 at its twenty-second session amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS in accordance with article 16(2)(d) of the 1973 Convention amendments to the 1978 Protocol (relating to Protocol I 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 5 October 1986 unless prior to this date one third or more of the Parties or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that in accordance with article 16(2)(g)(ii) of the 1973 Convention the amendments shall enter into force on 6 April 1987 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 1978 Protocol certified copies of the present resolution and the text of the amendments contained in the Annex;

5. FURTHER REQUESTS the Secretary-General to transmit to the Members of the Organization which are not Parties to the 1978 Protocol copies of the resolution and its Annex.

ANNEX

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

PROTOCOL I

PROVISIONS CONCERNING REPORTS ON INCIDENTS INVOLVING HARMFUL SUBSTANCES

(in accordance with Article 8 of the Convention)

The existing text of Protocol I is replaced by the following:

"Article I

Duty to Report

(1) The Master or other person having charge of any ship involved in an incident referred to in Article II of this Protocol shall report the particulars of such incident without delay and to the fullest extent possible in accordance with the provisions of this Protocol.

(2) In the event of the ship referred to in paragraph (1) of this Article being abandoned, or in the event of a report from such a ship being incomplete or unobtainable, the owner, charterer, manager or operator of the ship, or their agent shall, to the fullest extent possible, assume the obligations placed upon the Master under the provisions of this Protocol.

Article II

When to Make Reports

(1) The report shall be made when an incident involves:

(a) a discharge or probable discharge of oil, or noxious liquid substances carried in bulk, resulting from damage to the ship or its equipment, or for the purpose of securing the safety of a ship or saving life at sea; or

(b) a discharge or probable discharge of harmful substances in packaged form, including those in freight containers, portable tanks, road and rail vehicles and shipborne barges; or

(c) a discharge during the operation of the ship of oil or noxious liquid substances in excess of the quantity or instantaneous rate permitted under the present Convention.

(2) For the purposes of this Protocol:

(a) "Oil" referred to in sub-paragraph 1(a) of this Article means oil as defined in Regulation 1(1) of Annex I of the Convention.

(b) "Noxious liquid substances" referred to in sub-paragraph 1(a) of this Article means noxious liquid substances as defined in Regulation 1(6) of Annex II of the Convention.

(c) "Harmful substances" in packaged form referred to in sub-paragraph 1(b) of this Article means substances which are identified as marine pollutants in the International Maritime Dangerous Goods (IMDG) Code.

Article III

Contents of Report

Reports shall in any case include:

(a) identity of ships involved;

(b) time, type and location of incident;

(c) quantity and type of harmful substance involved;

(d) assistance and salvage measures.

Article IV

Supplementary Report

Any person who is obliged under the provisions of this Protocol to send a report shall, when possible:

(a) supplement the initial report, as necessary, and provide information concerning further developments; and

(b) comply as fully as possible with requests from affected States for additional information.

Article V

Reporting Procedures

(1) Reports shall be made by the fastest telecommunications channels available with the highest possible priority to the nearest coastal State.

(2) In order to implement the provisions of this Protocol, Parties to the present Convention shall issue, or cause to be issued, regulations or instructions on the procedures to be followed in reporting incidents involving harmful substances, based on guidelines developed by the Organization."

RESOLUTION MEPC.29(25)

adopted on 1 December 1987

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

(Designation of the Gulf of Aden as a special area)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

NOTING the functions which article 16 of the International Convention for the Prevention of Pollution from Ships, 1973 (hereinafter referred to as the "1973 Convention") and resolution A.297(VIII) confer on the Marine Environment Protection Committee for the consideration and adoption of amendments to the 1973 Convention,

NOTING FURTHER 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"),

HAVING CONSIDERED, at its twenty-fifth session, amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to the Annex of the 1978 Protocol, 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 October 1988 unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that in accordance with article 16(2)(g)(ii) of the 1973 Convention the amendments shall enter into force on 1 April 1989 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 1978 Protocol certified copies of the present resolution and the text of the amendments contained in the Annex;

5. FURTHER REQUESTS the Secretary-General to transmit to the Members of the Organization which are not Parties to the 1978 Protocol copies of the resolution and its Annex.

ANNEX

1987 AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

ANNEX I

Regulations for the Prevention of Pollution by Oil

Regulation 10

Methods for the Prevention of Oil Pollution from Ships while operating in Special Areas

The existing text of paragraph (1) is replaced by the following:

"(1) For the purposes of this Annex the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the "Gulfs area" and the Gulf of Aden area, which are defined as follows:

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

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

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

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

(e) The Gulfs area means the sea area located north west of the rhumb line between Ras al Hadd (22°30'N, 59°48'E) and Ras Al Fasteh (25°04'N, 61°25'E).

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

The introductory phrase of paragraph (7)(b) is replaced by the following:

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

RESOLUTION MEPC.34(27)

adopted on 17 March 1989

ADOPTION OF AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973 (Appendices II and III of 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 function of the Committee conferred upon it by International Convention 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 confers 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),

BEING DESIROUS of keeping appendices II and III of Annex II of MARPOL 73/78 up to date and compatible with the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) and the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code),

NOTING FURTHER resolution MEPC.32(27) by which the Committee adopted amendments to the IBC Code,

RECOGNIZING the need to bring the corresponding amendments to appendices II and III of Annex II of MARPOL 73/78 into force on the date on which the amendments to the IBC Code enter into force,

HAVING CONSIDERED, at its twenty-seventh session, the amendments to appendices II and III of Annex II of MARPOL 73/78 proposed by the Sub-Committee on Bulk Chemicals at its eighteenth session and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS in accordance with article 16(2)(d) of the 1973 Convention amendments to appendices II and III of Annex II 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 the date on which the conditions for the entry into force of the amendments to the IBC Code adopted by the Committee by resolution MEPC.32(27) are met, unless prior to that date, not less than one third of the Parties or the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that in accordance with article 16(2)(g)(ii) of the 1973 Convention the amendments shall enter into force six months after 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 1978 Protocol 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 the 1978 Protocol copies of the resolution and its Annex.

ANNEX

AMENDMENTS TO APPENDICES II AND III
OF ANNEX II OF MARPOL 73/78

The lists contained in Appendices II and III of Annex II of MARPOL 73/78 are replaced by the following:

APPENDIX II

Substance	I	II	III	IV
Acetaldehyde	1089	C		
Acetic acid	2789	D		
Acetic anhydride		D		
Acetone cyanohydrin	1541	A	0.1	0.05
Acrylamide solution (50% or less)	2074	D		
Acrylic acid	2218	D		
Acrylonitrile	1093	B		
Adiponitrile	2205	D		
Alcohol (C12-C15) poly(1-3) ethoxylates		A	0.1	0.05
Alcohol (C12-C15) poly(3-11) ethoxylates		A	0.1	0.05
Alcohol (C6-C17)(secondary) poly(3-6) ethoxylates		A	0.1	0.05
Alcohol (C6-C17)(secondary) poly(7-12) ethoxylates		B		
Alkyl acrylate-Vinyl pyridine copolymer in toluene		C		
Alkyl (C9-C17) benzenes		(D)		
Alkyl benzene sulphonic acid	2584, 2586	C		
Alkyl benzene sulphonic acid, sodium salt solution		C		
Allyl alcohol	1098	B		
Allyl chloride	1100	B		
Aluminium chloride (30% or less)/Hydrochloric acid (20% or less) solution		D		
Aluminium sulphate solution		D		
2-(2-Aminoethoxy) ethanol	3055	D		
Aminoethyl ethanolamine		(D)		
N-Aminoethylpiperazine	2815	D		
2-Amino-2-methyl-1-propanol (90% or less)		D		
Ammonia aqueous (28% or less)	2672*	C		
Ammonium nitrate solution (93% or less)		D		
Ammonium sulphate solution		D		
Ammonium sulphide solution (45% or less)	2683	B		
Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution		(C)		
Ammonium thiosulphate solution (60% or less)		(C)		
n-Amyl acetate	1104	C		
sec-Amyl acetate	1104	C		
Amyl acetate, commercial	1104	C		
n-Amyl alcohol	1105	D		
sec-Amyl alcohol	1105	D		
Amyl alcohol, primary	1105	D		
Aniline	1547	C		
Animal and fish oils, n.o.s. including: Cod liver oil Sperm oil		D		
Aviation alkylates (C8 paraffins and iso-paraffins BPT 95 - 120 °C)		(C)		
Benzene and mixtures having 10% benzene or more	1114**	C		
Benzene sulphonyl chloride	2225	D		
Benzyl acetate		C		

Pollution Category in brackets indicates that the substance has been provisionally included in this list and that further data are necessary in order to complete the evaluation of its environmental hazards, particularly in relation to living resources. Until the hazard evaluation is completed the Pollution Category assigned shall be used.

* UN number refers to 10-35%.

** UN number 1114 applies to Benzene.

Substance	I	II	III	IV
Benzyl alcohol		C		
Benzyl chloride	1738	B		
Brake fluid base mix: (Poly(2-8) alkylene(C2-C3) glycols/Polyalkylene(C2-C10) glycols monoalkyl(C1-C4) ethers and their borate esters)		D		
Butene oligomer		B		
n-Butyl acetate	1123	C		
sec-Butyl acetate	1123	D		
n-Butyl acrylate	2348	B		
Butylamine (all isomers)		C		
Butylbenzenes (all isomers)	2709	(A)	0.1	0.05
Butyl benzyl phthalate		A	0.1	0.05
n-Butyl butyrate		(C)		
Butyl/Decyl/Cetyl/Eicosyl methacrylate mixture		D		
Butylene glycol		D		
1,2-Butylene oxide	3022	C		
n-Butyl ether	1149	C		
Butyl lactate		D		
Butyl methacrylate		D		
n-Butyraldehyde	1129	B		
Butyric acid	2820	D		
gamma-Butyrolactone		D		
Calcium alkyl salicylate		C		
Calcium hydroxide slurry		D		
Calcium hypochlorite solution (15% or less)		C		
Calcium hypochlorite solution (more than 15%)		B		
Calcium naphthenate in mineral oil		A	0.1	0.05
Camphor oil	1130	B		
epsilon-Caprolactam (molten or aqueous solutions)		D		
Carbolic oil		A	0.1	0.05
Carbon disulphide	1131	B		
Carbon tetrachloride	1846	B		
Cashew nut shell oil (untreated)		D		
Chlorinated paraffins (C10-C13)		A	0.1	0.05
Chloroacetic acid (80% or less)	1750	C		
Chlorobenzene	1134	B		
Chloroform	1888	B		
Chlorohydrins (crude)		(D)		
o-Chloronitrobenzene	1578	B		
2- or 3-Chloropropionic acid		(C)		
Chlorosulphonic acid	1754	C		
m-Chlorotoluene	2238	B		
o-Chlorotoluene	2238	A	0.1	0.05
p-Chlorotoluene	2238	B		
Chlorotoluenes (mixed isomers)	2238	A	0.1	0.05
Choline chloride solutions		D		
Citric acid		D		

Substance	I	II	III	IV
Coal tar		A	0.1	0.05
Coal tar naphtha solvent		B		
Coal tar pitch (molten)		D		
Cobalt naphthenate in solvent naphtha		A	0.1	0.05
Coconut oil fatty acid		C		
Coconut oil fatty acid methyl ester		D		
Creosote (coal tar)		A	0.1	0.05
Creosote (wood)		A	0.1	0.05
Cresols (all isomers)	2076	A	0.1	0.05
Cresylic acid, sodium salt solution		A	0.1	0.05
Crotonaldehyde	1143	B		
Cycloheptane	2241	(C)		
Cyclohexane	1145	C		
Cyclohexanol		C		
Cyclohexanone	1915	D		
Cyclohexyl acetate		(B)		
Cyclohexylamine	2357	C		
1,3-Cyclopentadiene dimer (molten)		B		
Cyclopentane	1146	(C)		
Cyclopentene		(B)		
p-Cymene	2046	C		
Decahydronaphthalene	1147	(D)		
Decanoic acid		C		
Decene		B		
Decyl acrylate		A	0.1	0.05
Decyl alcohol (all isomers)		B		
Decylbenzene		D		
Diacetone alcohol	1148	D		
Dialkyl (C7-C13) phthalates		D		
Dibutylamine		C		
Dibutyl phthalate		A	0.1	0.05
Dichlorobenzenes (all isomers)	1592	B		
1,1-Dichloroethane	2362	B		
Dichloroethyl ether	1916	B		
1,6-Dichlorohexane		B		
2,2'-Dichloroisopropyl ether	2490	C		
Dichloromethane	1593	D		
2,4-Dichlorophenol	2021	A	0.1	0.05
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution		A	0.1	0.05
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or less)		A	0.1	0.05
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution		A	0.1	0.05
1,1-Dichloropropane		B		
1,2-Dichloropropane	1279	B		
1,3-Dichloropropane		B		

Substance	I	II	III	IV
1,3-Dichloropropene	2047	B		
Dichloropropene/Dichloropropane mixtures		B		
2,2-Dichloropropionic acid		D		
Diethylamine	1154	C		
Diethylaminoethanol	2686	C		
Diethylbenzene	2049	C		
Diethylene glycol butyl ether acetate		(D)		
Diethylene glycol dibutyl ether		D		
Diethylene glycol ethyl ether acetate		(D)		
Diethylene glycol methyl ether		C		
Diethylene glycol methyl ether acetate		(D)		
Diethylenetriamine	2079	D		
Di-(2-ethylhexyl) adipate		D		
Di-(2-ethylhexyl) phosphoric acid	1902	C		
Diethyl phthalate		C		
Diethyl sulphate	1594	(B)		
Diglycidyl ether of bisphenol A		B		
Diglycidyl ether of bisphenol F		B		
Di-n-hexyl adipate		B		
1,4-Dihydro-9,10-dihydroxy anthracene, disodium salt solution		D		
Diisobutylamine	2361	(C)		
Diisobutylene	2050	B		
Diisobutyl ketone	1157	D		
Diisobutyl phthalate		B		
Diisodecyl phthalate		D		
Diisononyl adipate		D		
Diisopropanolamine		C		
Diisopropylamine	1158	C		
Diisopropylbenzene (all isomers)		A	0.1	0.05
Diisopropyl naphthalene		D		
N,N-Dimethylacetamide solution (40% or less)		D		
Dimethyl adipate		B		
Dimethylamine solution (45% or less)	1160	C		
Dimethylamine solution (greater than 45% but not greater than 55%)	1160	C		
Dimethylamine solution (greater than 55% but not greater than 65%)	1160	C		
N,N-Dimethylcyclohexylamine	2264	C		
Dimethylethanolamine	2051	D		
Dimethylformamide	2265	D		
Dimethyl glutarate		C		
Dimethyl octanoic acid		(C)		
Dimethyl phthalate		C		
2,2-Dimethylpropane-1,3-diol		(D)		
Dimethyl succinate		C		
Dinitrotoluene (molten)	1600	B		

Substance	I	II	III	IV
Dinonyl phthalate		D		
1,4-Dioxane	1165	D		
Dipentene	2052	C		
Diphenyl		A	0.1	0.05
Diphenyl/Diphenyl ether mixtures		A	0.1	0.05
Diphenyl ether		A	0.1	0.05
Diphenyl ether/Diphenyl phenyl ether mixture		A	0.1	0.05
Diphenylmethane diisocyanate	2489	(B)		
Diphenylol propane-epichlorohydrin resins		B		
Di-n-propylamine	2383	C		
Dipropylene glycol methyl ether		(D)		
Ditridecyl phthalate		D		
Diundecyl phthalate		D		
Dodecene (all isomers)		(B)		
Dodecenyl succinic acid, dipotassium salt solution		(D)		
Dodecyl alcohol		B		
Dodecyl diphenyl ether disulphonate solution		B		
Dodecyl phenol		A	0.1	0.05
Drilling brines, containing Zinc salts		(A)	0.1	0.05
Epichlorohydrin	2023	C		
Ethanolamine	2491	D		
2-Ethoxyethanol	1171	D		
2-Ethoxyethyl acetate	1172	C		
Ethyl acetate	1173	D		
Ethyl acetoacetate		(D)		
Ethyl acrylate	1917	A	0.1	0.05
Ethylamine	1036	(C)		
Ethylamine solutions (72% or less)	2270	(C)		
Ethyl amyl ketone	2271	C		
Ethylbenzene	1175	C		
N-Ethylbutylamine		(C)		
Ethyl butyrate	1180	C		
Ethylcyclohexane		(C)		
N-Ethylcyclohexylamine		D		
Ethylene chlorohydrin	1135	C		
Ethylene cyanohydrin		(D)		
Ethylenediamine	1604	C		
Ethylenediamine, Tetraacetic acid, Tetrasodium salt solution		D		
Ethylene dibromide	1605	B		
Ethylene dichloride	1184	B		
Ethylene glycol		D		
Ethylene glycol acetate		(D)		
Ethylene glycol butyl ether acetate		(C)		
Ethylene glycol diacetate		C		
Ethylene glycol isopropyl ether		D		
Ethylene glycol methyl butyl ether		D		

Substance	I	II	III	IV
Ethylene glycol methyl ether	1188	D		
Ethylene glycol methyl ether acetate	1189	D		
Ethylene glycol phenyl ether		D		
Ethylene glycol phenyl ether/Diethylene glycol phenyl ether mixture		D		
Ethylene oxide/Propylene oxide mixture with an Ethylene oxide content of not more than 30% in weight	2983	D		
2-Ethylhexanoic acid		D		
2-Ethylhexyl acrylate		B		
2-Ethylhexylamine	2276	B		
Ethylidene norbornene		B		
Ethyl methacrylate	2277	(D)		
o-Ethylphenol		(A)	0.1	0.05
Ethyl propionate	1195	D		
2-Ethyl-3-propylacrolein		(B)		
Ethyltoluene		(B)		
Ferric chloride solutions	2582	C		
Ferric hydroxyethyl ethylenediamine triacetic acid, trisodium salt solution		D		
Ferric nitrate/Nitric acid solution		C		
Formaldehyde solutions (45% or less)	1198, 2209	C		
Formamide		D		
Formic acid	1779	D		
Fumaric adduct of rosin, water dispersion		B		
Furfural	1199	C		
Furfuryl alcohol	2874	C		
Glutaraldehyde solutions (50% or less)		D		
Glycidyl ester of C10 trialkylacetic acid		B		
Glyoxal solution (40% or less)		D		
Heptane (all isomers)	1206	(C)		
n-Heptanoic acid		(D)		
Heptanol (all isomers)		C		
Heptene (all isomers)		C		
Heptyl acetate		(B)		
Hexamethylenediamine adipate (50% in water)		D		
Hexamethylenediamine solution	1783	C		
Hexamethyleneimine	2493	C		
Hexamethylenetetramine solutions		D		
Hexane (all isomers)	1208	(C)		
Hexanoic acid		D		
Hexanol	2282	D		
Hexene (all isomers)		(C)		
Hexyl acetate	1233	B		
Hydrochloric acid	1789	D		
Hydrogen peroxide solutions (over 8% but not over 60%)	2014, 2984	C		

Substance	I	II	III	IV
Hydrogen peroxide solutions (over 60% but not over 70%)	2015	C		
2-Hydroxyethyl acrylate		B		
N-(Hydroxyethyl) ethylenediamine triacetic acid, trisodium salt solution		D		
Isoamyl acetate	1104	C		
Isoamyl alcohol	1105	D		
Isobutyl acetate	1213	C		
Isobutyl acrylate	2527	B		
Isobutyl formate	2393	D		
Isobutyraldehyde	2045	C		
Isophorone		D		
Isophoronediamine	2289	D		
Isophorone diisocyanate	2290	B		
Isoprene	1218	C		
Isopropanolamine		C		
Isopropylamine	1221	C		
Isopropylbenzene	1918	B		
Isopropylcyclohexane		(C)		
Isopropyl ether	1159	D		
Isovaleraldehyde	2058	C		
Lactic acid		D		
Lactonitrile solution (80% or less)		B		
Latex (ammonia inhibited)		D		
Lauric acid		B		
Maleic anhydride	2215	D		
Mercaptobenzothiazol, sodium salt solution		B		
Mesityl oxide	1229	D		
Metam sodium solution		A	0.1	0.05
Methacrylic acid	2531	D		
Methacrylic resin in 1,2-Dichloroethane solution		B		
Methacrylonitrile	3079	(B)		
3-Methoxybutyl acetate	2708	D		
Methyl acetoacetate		D		
Methyl acrylate	1919	B		
Methylamine solutions (42% or less)	1235	C		
Methylamyl acetate	1233	(C)		
Methylamyl alcohol	2053	(C)		
Methyl amyl ketone	1110	(C)		
Methyl butenol		(D)		
Methyl tert-butyl ether	2398	D		
Methyl butyl ketone		D		
Methyl butynol		D		
Methyl butyrate	1237	(C)		
Methylcyclohexane	2296	(C)		
Methylcyclopentadiene dimer		(B)		
2-Methyl-6-ethyl aniline		C		

Substance	I	II	III	IV
2-Methyl-5-ethyl pyridine	2300	(B)		
Methyl formate	1243	D		
Methyl heptyl ketone		B		
Methyl isobutyl ketone	1245	D		
Methyl methacrylate	1247	D		
Methylnaphthalene		A	0.1	0.05
2-Methyl-1-pentene	2288	C		
Methyl propyl ketone		D		
2-Methylpyridine	2313	B		
4-Methylpyridine	2313	B		
N-Methyl-2-pyrrolidone		B		
Methyl salicylate		(B)		
alpha-Methylstyrene	2303	A	0.1	0.05
Morpholine	2054	D		
Motor fuel anti-knock compounds	1649	A	0.1	0.05
Naphthalene (molten)	2304	A	0.1	0.05
Naphthalene sulphonic acid-formaldehyde copolymer, sodium salt solution		D		
Naphthenic acids		A	0.1	0.05
Neodecanoic acid		C		
Nitrating acid (mixture of sulphuric and nitric acids)	1796	(C)		
Nitric acid (less than 70%)	2031	C		
Nitric acid (70% and over)	2031, 2032	C		
Nitrilotriacetic acid, trisodium salt solution		D		
Nitrobenzene	1662	B		
o-Nitrophenol (molten)	1663	B		
1- or 2-Nitropropane	2608	D		
Nitropropane (60%)/Nitroethane (40%) mixture	1993	D		
o- or p-Nitrotoluenes	1664	C		
Nonane (all isomers)	1920	(C)		
Nonanoic acid (all isomers)		D		
Nonene		B		
Nonyl alcohol (all isomers)		C		
Nonyl methacrylate monomer		(D)		
Nonylphenol		A	0.1	0.05
Nonyl phenol poly(4-12) ethoxylates		B		
Octane (all isomers)	1262	(C)		
Octanoic acid (all isomers)		D		
Octanol (all isomers)		C		
Octene (all isomers)		B		
n-Octyl acetate		D		
Octyl aldehydes		(B)		
Octyl nitrates (all isomers)		A	0.1	0.05
Olefin mixtures (C5-C7)		C		
Olefin mixtures (C5-C15)		B		
alpha-Olefins (C6-C18) mixtures		B		

Substance	I	II	III	IV
Oleic acid		D		
Oleum	1831	C		
Palm nut oil fatty acid		(C)		
Palm oil fatty acid methyl ester		D		
Palm stearin		D		
Paraldehyde	1264	C		
Pentachloroethane	1669	B		
1,3-Pentadiene		C		
Pentaethylenehexamine		D		
Pentane (all isomers)	1265	(C)		
Pentanoic acid		D		
Pentene (all isomers)		C		
Perchloroethylene	1897	B		
Phenol	2312	B		
1-Phenyl-1-xylyl ethane		C		
Phosphoric acid	1805	D		
Phosphorus, yellow or white	1381, 2447	A	0.01	0.005
Phthalic anhydride (molten)	2214	C		
Pinene	2368	B		
Polyalkylene glycol butyl ether		D		
Polyethylene polyamines	2734, 2735	(C)		
Polyferric sulphate solution		(C)		
Polymethylene polyphenyl isocyanate	2207	D		
Polypropylene glycol		D		
Potassium hydroxide solution	1814	C		
n-Propanolamine		C		
beta-Propiolactone		D		
Propionaldehyde	1275	D		
Propionic acid	1848	D		
Propionic anhydride	2496	C		
Propionitrile	2404	C		
n-Propyl acetate	1276	D		
n-Propylamine	1277	C		
n-Propylbenzene	2364	(C)		
n-Propyl chloride		B		
Propylene dimer		(C)		
Propylene glycol ethyl ether		(D)		
Propylene glycol methyl ether		(D)		
Propylene glycol monoalkyl ether		(D)		
Propylene oxide	1280	D		
Propylene tetramer	2850	B		
Propylene trimer	2057	B		
Pyridine	1282	D		
Rosin		B		
Rosin soap (disproportionated) solution		B		
Silicon tetrachloride		D		

Substance	I	II	III	IV
Sodium aluminate solution		C		
Sodium borohydride (15% or less)/Sodium hydroxide solution		C		
Sodium carbonate solution		D		
Sodium dichromate solution (70% or less)		C		
Sodium hydrogen sulphite solution (35% or less)	2693	D		
Sodium hydrosulphide/Ammonium sulphide solution		B		
Sodium hydrosulphide solution (45% or less)	2949	B		
Sodium hydroxide solution	1824	D		
Sodium hypochlorite solution (15% or less)	1791	C		
Sodium nitrite solution	1577	B		
Sodium silicate solution		D		
Sodium sulphide solution		B		
Sodium sulphite solution		C		
Sodium thiocyanate solution (56% or less)		(B)		
Styrene monomer	2055	B		
Sulpholane		D		
Sulphuric acid	1830	C		
Sulphuric acid, spent	1832	C		
Tall oil (crude and distilled)		B		
Tall oil fatty acid (resin acids less than 20%)		(C)		
Tall oil soap (disproportionated) solution		B		
Tallow		D		
Tallow fatty acid		(D)		
Tetrachloroethane	1702	B		
Tetraethylene pentamine	2320	D		
Tetrahydrofuran	2056	D		
Tetrahydronaphthalene		C		
1,2,3,5-Tetramethylbenzene		(C)		
Titanium tetrachloride	1838	D		
Toluene	1294	C		
Toluenediamine	1709	C		
Toluene diisocyanate	2078	C		
o-Toluidine	1708	C		
Tributyl phosphate		B		
1,2,4-Trichlorobenzene	2321	B		
1,1,1-Trichloroethane	2831	B		
1,1,2-Trichloroethane		B		
Trichloroethylene	1710	B		
1,2,3-Trichloropropane		B		
1,1,2-Trichloro-1,2,2-trifluoroethane		C		
Tricresyl phosphate (containing less than 1% ortho-isomer)		A	0.1	0.05
Tricresyl phosphate (containing 1% or more ortho-isomer)	2574#	A	0.1	0.05
Triethanolamine		D		
Triethylamine	1296	C		

UN number 2574 applies to Tricresyl phosphate containing more than 3% ortho-isomer.

Substance	I	II	III	IV
Triethylbenzene		A	0.1	0.05
Triethylene glycol ethyl ether		(D)		
Triethylene glycol methyl ether		(D)		
Triethylenetetramine	2259	D		
Trimethylacetic acid		D		
Trimethylamine		C		
Trimethyl benzenes (all isomers)		B		
Trimethylhexamethylene diamine (2,2,4- and 2,4,4- isomers)	2327	D		
Trimethylhexamethylene diisocyanate (2,2,4- and 2,4,4- isomers)	2328	B		
Trimethylol propane polyethoxylate		D		
2,2,4-Trimethyl-1,3-pentanediol-1-isobutyrate		C		
Tripropylene glycol methyl ether		(D)		
Trixylyl phosphate		A	0.1	0.05
Turpentine	1299	B		
Undecanoic acid		(C)		
1-Undecene		B		
Undecyl alcohol		B		
Urea/Ammonium mono- and di-hydrogen phosphite/Potassium chloride solution		(D)		
Urea/Ammonium nitrate solution		D		
Urea/Ammonium nitrate solution (containing aqua Ammonia)		C		
Urea/Ammonium phosphate solution		D		
n-Valeraldehyde	2058	D		
Vegetable oil, n.o.s., including:		D		
Castor oil				
Coconut oil				
Corn oil				
Cottonseed oil				
Groundnut oil				
Linseed oil				
Olive oil				
Palm nut oil				
Palm oil				
Rape seed oil				
Rice bran oil				
Safflower oil				
Sesame oil				
Soya bean oil				
Sunflower oil				
Tung oil				
Vinyl acetate	1301	C		
Vinyl ethyl ether	1302	C		
Vinylidene chloride	1303	B		
Vinyl neodecanoate		B		

Substance	I	II	III	IV
Vinyltoluene	2618	A	0.1	0.05
White spirit, low (15-20%) aromatic	1300	(B)		
Xylenes	1307	C		
Xylenol	2261	B		

APPENDIX III

Substance	UN number
Acetone	1090
Acetonitrile	1648
Alcoholic beverages, n.o.s.	
Alcohols (C13 and above)	
Aminoethyldiethanolamine/Aminoethylethanolamine solution	
2-Amino-2-hydroxymethyl-1,3-propanediol solution (40% or less)	
tert-Amyl alcohol	1105
Apple juice	
Behenyl alcohol	
Benzene tricarboxylic acid, trioctyl ester	
n-Butyl alcohol	1120
sec-Butyl alcohol	1120
tert-Butyl alcohol	1120
Butyl stearate	
Calcium carbonate slurry	
Calcium nitrate/Magnesium nitrate/Potassium chloride solution	
Cetyl/Eicosyl methacrylate mixture	
Cetyl/Stearyl alcohol	
Chlorinated paraffins (C14-C17) (with 52% chlorine)	
Clay slurry	
Coal slurry	
Dextrose solution	
Diethanolamine	
Diethyl ether	1155
Diethylene glycol	
Diethylene glycol butyl ether	
Diethylene glycol diethyl ether	
Diethylene glycol ethyl ether	
Diethylenetriamine pentaacetic acid, pentasodium salt solution	
Diheptyl phthalate	
Dihexyl phthalate	
Diisooctyl phthalate	
Dioctyl phthalate	
Dipropylene glycol	
Dodecane (all isomers)	
Dodecyl benzene	
Dodecyl methacrylate	
Dodecyl/Pentadecyl methacrylate mixture	
Drilling brines:	
Calcium bromide solution	
Calcium chloride solution	
Sodium chloride solution	
Ethyl alcohol	1170
Ethylene carbonate	
Ethylene glycol butyl ether	2369
Ethylene glycol tert-butyl ether	
Ethylene-Vinyl acetate copolymer (emulsion)	
Fatty acid (saturated, C13 and above)	

Substance	UN number
Glucose solution	
Glycerine	
Glycerol polyalkoxylate	
Glyceryl triacetate	
Glycine, sodium salt solution	
Hexamethylene glycol	
Hexylene glycol	
Isobutyl alcohol	1212
Isopropyl acetate	1220
Isopropyl alcohol	1219
Kaolin slurry	
Lard	
Latex:	
Carboxylated styrene-Butadiene copolymer	
Styrene-butadiene rubber	
Lignin sulphonic acid, sodium salt solution	
Magnesium chloride solution	
Magnesium hydroxide slurry	
3-Methoxy-1-butanol	
Methyl acetate	1231
Methyl alcohol	1230
Methyl ethyl ketone	
2-Methyl-2-hydroxy-3-butyne	
3-Methyl-3-methoxy butanol	
3-Methyl-3-methoxy butyl acetate	
Molasses	
Octyl decyl adipate	
alpha-Olefins (C13-C18)	
Olefins (C13 and above, all isomers)	
n-Paraffins (C10-C20)	
Paraffin wax	
Petrolatum	
Polyaluminium chloride solution	
Polybutene	
Polyethylene glycol dimethyl ether	
Polyethylene glycols	
Polypropylene glycol methyl ether	
Polysiloxane	
n-Propyl alcohol	
Propylene glycol	
Propylene-butylene copolymer	
Sodium alumino silicate slurry	
Sodium chlorate solution (50% or less)	2428
Sorbitol solution	
Sulphur (molten)	2448
Tetraethylene glycol	
Tridecane	
Tridecanoic acid	

Substance	UN number
Triethylene glycol	
Triethylene glycol butyl ether	
Triisopropanolamine	
Tripropylene glycol	
Urea formaldehyde resin solution	
Urea solution	
Vegetable protein solution (hydrolyzed)	
Water	

RESOLUTION MEPC.36(28)

adopted by the Marine Environment Protection Committee
on 17 October 1989

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

(Amendments to Annex V 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 Committee,

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 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, at its twenty-eighth session, amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to the Annex of the 1978 Protocol, 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 17 August 1990, unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 18 February 1991 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 Annex V of the 1978 Protocol certified copies of the present resolution and the text of the amendments contained in the Annex;

5. FURTHER REQUESTS the Secretary-General to transmit to the Members of the Organization which are not Parties to Annex V of the 1978 Protocol copies of the resolution and its annex.

ANNEX

TEXT OF AMENDMENTS TO REGULATIONS
OF ANNEX V OF MARPOL 73/78

(Regulation 5 - Disposal of Garbage within Special Areas
"Designation of the North Sea as a Special Area"
and Regulation 6 - Exceptions)

Regulation 5 - Disposal of Garbage within Special Areas

The introductory sentence was amended to read as follows:

"(1) For the purposes of this Annex the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the 'Gulfs area' and the North Sea area which are defined as follows:"

New subparagraph (f) was added as follows:

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

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

(ii) the Skagerrak, the southern limit of which is determined east of the Skaw by latitude 57°44.8' N; and

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

Regulation 6 - Exceptions

Paragraph (c) was amended to read as follows:

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

RESOLUTION MEPC.39(29)

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

(Introduction of the Harmonized System of Survey and Certification to Annexes I and II of MARPOL 73/78)

adopted on 16 March 1990

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38 of the Convention on the International Maritime Organization concerning the functions of the Committee,

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 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),

RECALLING that the International Conference on Tanker Safety and Pollution Prevention, 1978, by resolution 10, recommended that IMO take the necessary action to amend the International Convention for the Safety of Life at Sea, 1974 (the 1974 SOLAS Convention), the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the 1978 Protocol relating thereto (MARPOL 73/78), and the International Convention on Load Lines, 1966 (the 1966 Load Line Convention), with a view to standardizing the periods of validity of the certificates as well as the intervals of surveys required by these Conventions,

NOTING FURTHER that the International Conference on the Harmonized System of Survey and Certification, 1988, had adopted the Protocol of 1988 relating to the International Convention for the Safety of Life at Sea, 1974 (the 1988 SOLAS Protocol), and the Protocol of 1988 relating to the International Convention on Load Lines, 1966 (the 1988 Load Line Protocol), which introduce, inter alia, the harmonized system of survey and certification under the 1974 SOLAS Convention and the 1966 Load Line Convention, and that the Conference recommended the Maritime Safety Committee and the Marine Environment Protection Committee to take the necessary action:

(a) to amend MARPOL 73/78, the IBC Code, the BCH Code and the IGC Code in order to harmonize their survey and certification requirements with those of the 1988 SOLAS Protocol and the 1988 Load Line Protocol and,

(b) to bring those amendments into force on the same date, or on a date as close as possible to the date on which the 1988 SOLAS Protocol and the 1988 Load Line Protocol enter into force.

HAVING CONSIDERED, at its twenty-ninth session, amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to the Annex of the 1978 Protocol, the text of which is set out in the Annex to the present resolution;

2. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to the 1978 Protocol certified copies of the present resolution and the text of the amendments contained in the Annex;

3. DETERMINES, in accordance with article 16(2)(f)(ii) and (iii) of the 1973 Convention, that the amendments shall be deemed to have been accepted six months after the date on which the conditions for the entry into force of both the 1988 SOLAS Protocol and the 1988 Load Line Protocol are met, provided that the date of acceptance is not before 1 August 1991, unless prior to that date, objections are communicated to the Organization as provided for in article 16(2)(f)(iii);

4. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force six months after their acceptance in accordance with the preceding paragraph;

5. REQUESTS the Secretary-General to inform all Parties when the conditions for the entry into force of both the 1988 SOLAS Protocol and the 1988 Load Line Protocol are met and, in conformity with article 16(8) of the Convention, when the amendments to the 1978 Protocol contained in the Annex to the present resolution will enter into force;

6. FURTHER REQUESTS the Secretary-General to transmit to the Members of the Organization which are not Parties to the 1978 Protocol copies of the resolution and its Annex and to inform them when the amendments enter into force.

ANNEX

AMENDMENTS TO ANNEXES I AND II OF MARPOL 73/78

1 MARPOL 73/78, ANNEX I

Regulation 1

Definitions

New definition is added as follows:

"(31) "Anniversary date" means the day and the month of each year which will correspond to the date of expiry of the International Oil Pollution Prevention Certificate."

Regulation 4

Surveys and Inspections

The existing title is replaced by the following:

"Surveys"

The existing text is replaced by the following:

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

(a) An initial survey before the ship is put in service or before the Certificate required under regulation 5 of this Annex is issued for the first time, which shall include a complete survey of its structure, equipment, systems, fittings, arrangements and material in so far as the ship is covered by this Annex. This survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of this Annex.

(b) A renewal survey at intervals specified by the Administration, but not exceeding 5 years, except where regulation 8(2), 8(5), 8(6) or 8(7) of this Annex is applicable. The renewal survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with applicable requirements of this Annex.

(c) An intermediate survey within 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)(d) of this regulation. The intermediate survey shall be such as to ensure that the equipment and associated pump and piping systems, including oil discharge monitoring and control systems, crude oil washing systems, oily-water separating equipment and oil filtering systems, fully comply with the applicable requirements of this Annex and are in good working order. Such intermediate surveys shall be endorsed on the Certificate issued under regulation 5 or 6 of this Annex.

(d) An annual survey within 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)(a) of this regulation to ensure that they have been maintained in accordance with paragraph (4) of this regulation and that they remain satisfactory for the service for which the ship is intended. Such annual surveys shall be endorsed on the Certificate issued under regulation 5 or 6 of this Annex.

(e) An additional survey either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in paragraph (4) of this regulation, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory and that the ship complies in all respects with the requirements of this Annex.

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

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

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

(i) require repairs to a ship; and

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

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

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

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

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

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

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

Regulation 5

Issue of Certificate

The existing heading is replaced by the following:

"Issue or Endorsement of Certificate"

The existing text is replaced by the following:

"(1) An International Oil Pollution Prevention Certificate shall be issued, after an initial or renewal survey in accordance with the provisions of regulation 4 of this Annex, to any oil tanker of 150 tons gross tonnage and above and any other ships of 400 tons gross tonnage and above which are engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention.

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

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

Regulation 6

Issue of Certificate by another Government

The existing heading is replaced by the following:

"Issue or Endorsement of a Certificate by another Government".

The existing text is replaced by the following:

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

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

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

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

Regulation 7

Form of Certificate

The existing text is replaced by the following:

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

Regulation 8

Duration of Certificate

The existing heading is replaced by the following:

"Duration and Validity of Certificate".

The existing text is replaced by the following:

"(1) An International Oil Pollution Prevention Certificate shall be issued for a period specified by the Administration which shall not exceed 5 years.

(2) (a) Notwithstanding the requirements of paragraph (1) of this regulation, when the renewal survey is completed within 3 months before the expiry date of the existing 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.

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

(c) 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 4(1)(c) and 4(1)(d) 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 paragraph (2)(b), (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 4 of this Annex, then:

(a) the anniversary date shown on the Certificate shall be amended by endorsement to a date which shall not be more than 3 months later than the date on which the survey was completed;

(b) the subsequent annual or intermediate survey required by regulation 4 of this Annex shall be completed at the intervals prescribed by that regulation using the new anniversary date;

(c) the expiry date may remain unchanged provided one or more annual or intermediate surveys, as appropriate, are carried out so that the maximum intervals between the surveys prescribed by regulation 4 of this Annex are not exceeded.

(9) A Certificate issued under regulation 5 or 6 of this Annex shall cease to be valid in any of the following cases:

(a) if the relevant surveys are not completed within the periods specified under regulation 4(1) of this Annex;

(b) if the Certificate is not endorsed in accordance with regulation 4(1)(c) or 4(1)(d) of this Annex.

(c) Upon transfer of the ship to the flag of another State. A new Certificate shall only be issued when the Government issuing the new Certificate is fully satisfied that the ship is in compliance with the requirements of regulation 4(4)(a) and 4(4)(b) of this Annex. In the case of a transfer between Parties, if requested within 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".

Appendix II

FORM OF CERTIFICATE

The existing Form of Certificate is replaced by the following:

"INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE

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

Issued under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, and as amended by resolution MEPC.39(29), (hereinafter referred to as "the Convention") under the authority of the Government of:

.....
(full designation of the country)

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

Particulars of ship 1/

Name of ship .....

Distinctive number or letters .....

Port of registry .....

Gross tonnage .....

Deadweight of ship (metric tons) 2/

.....

IMO Number 3/ .....

Type of ship 4/:

Oil tanker

Ship other than an oil tanker with cargo tanks coming under regulation 2(2) of Annex I of the Convention.

Ship other than any of the above.

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with regulation 4 of Annex I of the Convention.

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

This Certificate is valid until 5/
subject to surveys in accordance with regulation 4 of Annex I of the Convention.

Issued at .....
(Place of issue of Certificate)

....
(Date of issue) (Signature of 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 4 of Annex I 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 .....

(Seal or stamp of the authority, as appropriate)

Annual/Intermediate[4/] survey:

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Annual/Intermediate[4/] survey:

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Annual survey:

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Annual/intermediate survey in accordance with regulation 8(8)(c)

THIS IS TO CERTIFY that, at an annual/intermediate[4/] survey in accordance with regulation 8(8)(c) of Annex I of the Convention, the ship was found to comply with the relevant provisions of the Convention.

Signed .....
(Signature of 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 8(3) applies

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8(3) of Annex I of the Convention, be accepted as valid until .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Endorsement where the renewal survey has been completed and regulation 8(4) applies

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8(4) of Annex I of the Convention, be accepted as valid until .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Endorsement to extend the validity of the Certificate until reaching the port of survey or for a period of grace where regulation 8(5) or 8(6) applies

This Certificate shall, in accordance with regulation 8(5) or 8(6)4/ of Annex I of the Convention, be accepted as valid until .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Endorsement for advancement of anniversary date where regulation 8(8) applies

In accordance with regulation 8(8) of Annex I of the Convention, the new anniversary date is .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

In accordance with regulation 8(8) of Annex I of the Convention, the new anniversary date is .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)".

1/ Alternatively, the particulars of the ship may be placed horizontally in boxes.

2/ For oil tankers.

3/ In accordance with resolution A.600(15) - IMO Ship Identification Number Scheme, this information may be included voluntarily.

4/ Delete as appropriate.

5/ Insert the date of expiry as specified by the Administration in accordance with regulation 8(1) of Annex I of the Convention. The day and the month of this date correspond to the anniversary date as defined in regulation 1(31) of Annex I of the Convention, unless amended in accordance with regulation 8(8) of Annex I of the Convention.

Regulation 1

Definitions

New definition is added as follows:

"(14) "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".

Regulation 10

Surveys

The existing text is replaced by the following:

"(1) Ships carrying noxious liquid substances in bulk shall be subject to the surveys specified below:

(a) An initial survey before the ship is put in service or before the Certificate required under regulation 11 of this Annex is issued for the first time, which shall include a complete survey of its structure, equipment, systems, fittings, arrangements and material in so far as the ship is covered by this Annex. This survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of this Annex.

(b) A renewal survey at intervals specified by the Administration, but not exceeding 5 years, except where regulation 12(2), 12(5), 12(6) or 12(7) of this Annex is applicable. The renewal survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with applicable requirements of this Annex.

(c) An intermediate survey within 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)(d) 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 11 of this Annex.

(d) 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)(a) 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 11 of this Annex.

(e) An additional survey either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in paragraph (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) (a) Surveys of ships as regards the enforcement of the provisions of this Annex shall be carried out by officers of the Administration. The Administration may, however, entrust the surveys either to surveyors nominated for the purpose or to organizations recognized by it.

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

(i) require repairs to a ship; and

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

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

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

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

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

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

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

Regulation 11

Issue of Certificate

The existing heading is replaced by the following:

"Issue or Endorsement of Certificate".

The existing text is replaced by the following:

"(1) An International 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 10 of this Annex, to any ship carrying 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) (a) 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.

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

(c) 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.

(d) 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 V to this Annex. If the language used is neither English nor French, the text shall include a translation into one of these languages.

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

Regulation 12

Duration of Certificate

The existing heading is replaced by the following:

"Duration and Validity of Certificate".

The existing text is replaced by the following:

"(1) An International 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)(a) Notwithstanding the requirements of paragraph (1) of this regulation, when the renewal survey is completed within 3 months before the expiry date of the existing 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.

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

(c) 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 10(1)(c) and 10(1)(d) 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 paragraph (2)(b), (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 10 of this Annex, then:

(a) the anniversary date shown on the Certificate shall be amended by endorsement to a date which shall not be more than 3 months later than the date on which the survey was completed;

(b) the subsequent annual or intermediate survey required by regulation 10 of this Annex shall be completed at the intervals prescribed by that regulation using the new anniversary date;

(c) the expiry date may remain unchanged provided one or more annual or intermediate surveys, as appropriate, are carried out so that the maximum intervals between the surveys prescribed by regulation 10 of this Annex are not exceeded.

(9) A Certificate issued under regulation 11 of this Annex shall cease to be valid in any of the following cases:

(a) if the relevant surveys are not completed within the periods specified under regulation 10(1) of this Annex;

(b) if the Certificate is not endorsed in accordance with regulation 10 (1)(c) or 10(1)(d) of this Annex;

(c) upon transfer of the ship to the flag of another State. A new Certificate shall only be issued when the Government issuing the new Certificate is fully satisfied that the ship is in compliance with the requirements of regulation 10(4)(a) and 10(4)(b) 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".

Appendix V

FORM OF CERTIFICATE

The existing Form of Certificate is replaced by the following:

"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, and as amended by resolution MEPC.39(29) (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 1/

Name of ship .....

Distinctive number or letters .....

Port of registry .....

Gross tonnage .....

IMO Number 2/ .....

THIS IS TO CERTIFY:

1 That the ship has been surveyed in accordance with regulation 10 of Annex II of the Convention.

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

3 That the ship has been provided with a Manual in accordance with the Standards for the Procedures and Arrangements as called for by regulations 5, 5A and 8 of Annex II of the Convention, and that the arrangements and equipment of the ship prescribed in the Manual are in all respects satisfactory and comply with the applicable requirements of the said Standards.

4 That the ship is suitable for the carriage in bulk of the following noxious liquid substances, provided that all relevant operational provisions of Annex II of the Convention are observed.

Noxious liquid substances	Conditions of carriage (tank numbers etc.)
Continued on additional signed and dated sheets 3/	

This Certificate is valid until :.....4/
subject to surveys in accordance with regulation 10 of Annex II of the Convention.

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 10 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 .....

(Seal or stamp of the authority, as appropriate)

Annual/Intermediate[3/] survey:

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Annual/Intermediate[3/] survey:

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Annual survey:

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Annual/intermediate survey in accordance with regulation 12(8)(c)

THIS IS TO CERTIFY that, at an annual/intermediate[3/] survey in accordance with regulation 12(8)(c) 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 .....

(Seal or stamp of the authority, as appropriate)

Endorsement to extend the Certificate if valid for less than 5 years where regulation 12(3) applies

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 12(3) of Annex II of the Convention, be accepted as valid until .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Endorsement where the renewal survey has been completed and regulation 12(4) applies

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 12(4) of Annex II of the Convention, be accepted as valid until .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Endorsement to extend the validity of the Certificate until reaching the port of survey or for a period of grace where regulation 12(5) or 12(6) applies

This Certificate shall, in accordance with regulation 12(5) or 12(6)3/ of Annex II of the Convention, be accepted as valid until .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

Endorsement for advancement of anniversary date where regulation 12(8) applies

In accordance with regulation 12(8) of Annex II of the Convention, the new anniversary date is .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)

In accordance with regulation 12(8) of Annex II of the Convention, the new anniversary date is .....

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

Place .....

Date .....

(Seal or stamp of the authority, as appropriate)".

1/ Alternatively, the particulars of the ship may be placed horizontally in boxes.

2/ In accordance with resolution A.600(15) - IMO Ship Identification Number Scheme, this information may be included voluntarily.

3/ Delete as appropriate.

4/ Insert the date of expiry as specified by the Administration in accordance with regulation 12(1) of Annex II of the Convention. The day and the month of this date correspond to the anniversary date as defined in regulation 1(14) of Annex II of the Convention, unless amended in accordance with regulation 12(8) of Annex II of the Convention.

RESOLUTION MEPC.42(30)

adopted by the Marine Environment Protection Committee
on 16 November 1990

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

(Designation of Antarctic area as a special area under
Annexes I and V 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 Committee,

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 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, at its thirtieth session, amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

HAVING CONSIDERED ALSO the objective that all wastes are to be removed from the Antarctic area due to the ecological importance of the fragile ecosystems of the area,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to the Annex of the 1978 Protocol, 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 16 September 1991 unless, prior to this date, one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of 1973 Convention, the amendments shall enter into force on 17 March 1992 upon their acceptance in accordance with paragraph 2 above;

4. DECIDES that the requirements of Regulation 10 of Annex I and Regulation 5 of Annex V of MARPOL 73/78 in respect of the Antarctic area shall take effect on the day the amendments thereto adopted under this resolution enter into force, which is expected to be 17 March 1992;

5. REQUESTS the Secretary-General, in conformity with article 16(2)(e) of the 1973 Convention, to transmit to all Parties to Annexes I and V of MARPOL 73/78 certified copies of the present resolution and the text of the amendments contained in Annexes 1 and 2 respectively;

6. FURTHER REQUESTS the Secretary-General to transmit to the Members of the Organization which are not Parties to Annexes I or V of MARPOL 73/78 copies of the resolution and its annexes.

ANNEX 1

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

ANNEX I

REGULATIONS FOR THE PREVENTION OF POLLUTION BY OIL

Regulation 10 is amended to read as follows:

Regulation 10

Methods for the Prevention of Oil Pollution from Ships while Operating in Special Areas

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

(a) - (f) No change.

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

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

(a) Any discharge into the sea of oil or oily mixture from any oil tanker, or any ship of 400 tons gross tonnage and above other than an oil tanker, shall be prohibited, while in a special area. In respect of the Antarctic area, any discharge into the sea of oil or oily mixture from any ship shall be prohibited.

(b) Except as provided for in respect of the Antarctic area under paragraph 2(a) of this Regulation, any discharge into the sea of oil or oily mixture from a ship of less than 400 tons gross tonnage, other than an oil tanker, shall be prohibited while in a special area, except when the oil content of the effluent without dilution does not exceed 15 parts per million or alternatively when all of the following conditions are satisfied:

(2)(b) (i), (ii), (iii) No change.

(3) - (7) No change.

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

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

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

ANNEX 2

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

ANNEX V

REGULATIONS FOR THE PREVENTION OF POLLUTION BY GARBAGE FROM SHIPS

Regulation 5 is amended to read as follows:

Regulation 5

Disposal of Garbage within Special Areas

(1) For the purposes of this Annex, the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the "Gulfs area", the North Sea area and the Antarctic area, which are defined as follows:

(a) - (f) No change.

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

(2) - (4) No change.

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

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

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

RESOLUTION MEPC.47(31)

adopted on 4 July 1991

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

(New regulation 26 and other amendments to 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 Committee,

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 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 Conference on International Co-operation on Oil Pollution Preparedness and Response convened by the Organization in November 1990, has adopted the International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990 which requires, inter alia, all ships to have a shipboard oil pollution emergency plan,

HAVING CONSIDERED, at its thirty-first session, amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to the Annex of the 1978 Protocol, 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 4 October 1992, unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 4 April 1993 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. FURTHER REQUESTS the Secretary-General to transmit copies of the resolution and its Annex to the Members of the Organization which are not Parties to MARPOL 73/78.

ANNEX

AMENDMENTS TO ANNEX I OF MARPOL 73/78

1 The seventh sentence of regulation 15(3)(a) is replaced with the following two sentences:

"A manually operated alternative method shall be provided and may be used in the event of such failure, but the defective unit shall be made operable as soon as possible. The port State authority may allow the tanker with a defective unit to undertake one ballast voyage before proceeding to a repair port".

2 New paragraph (3) is added to regulation 17 as follows:

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

3 The following new chapter IV is added to the existing text:

"CHAPTER IV - PREVENTION OF POLLUTION ARISING FROM AN OIL POLLUTION INCIDENT

Regulation 26

Shipboard Oil Pollution Emergency Plan

(1) Every oil tanker of 150 tons gross tonnage and above and every ship other than an oil tanker of 400 tons gross tonnage and above shall carry on board a shipboard oil pollution emergency plan approved by the Administration. In the case of ships built before 4 April 1993 this requirement shall apply 24 months after that date.

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

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

---

* Reference is made to "Guidelines for the development of the shipboard oil pollution emergency plans" to be developed by the Organization.

** Reference is made to "General principles for ship reporting system and ship reporting requirements, including Guidelines for reporting incidents involving dangerous goods, harmful substances and/or marine pollutants" adopted by the Organization by resolution A.648(16).

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

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

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

Revised Forms of Supplements to the IOPP Certificate

Forms A and B of Supplements to the IOPP Certificate are replaced by those reproduced in the following pages.

FORM A
(Revised 1991)

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, 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 Status of ship:

1.7.1 New ship in accordance with regulation 1(6) /_/

1.7.2 Existing ship in accordance with regulation 1(7) /_/

1.7.3 The ship has been accepted by the Administration as an "existing ship" under regulation 1(7) due to unforeseen delay in delivery /_/

2 EQUIPMENT FOR THE CONTROL OF OIL DISCHARGE FROM MACHINERY SPACE BILGES AND OIL FUEL TANKS (regulations 10 and 16)

2.1 Carriage of ballast water in oil fuel tanks:

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

2.2 Type of separating/filtering equipment fitted:

2.2.1 Oily-water separating equipment (100 ppm equipment) /_/

2.2.2 Oil filtering equipment (15 ppm equipment) /_/

2.3 Type of control system:

2.3.1 Discharge monitoring and control system (regulation 16(5))

.1 with automatic stopping device /_/

.2 with manual stopping device /_/

2.3.2 15 ppm alarm (regulation 16(7)) /_/

2.3.3 Automatic stopping device for discharges in special areas (regulation 10(3)(b)(vi)) /_/

2.3.4 Oil content meter (resolution A.444(XI))

.1 with recording device ☐

.2 without recording device ☐

2.4 Approval standards:

2.4.1 The separating/filtering equipment: ☐

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

.2 has been approved in accordance with resolution A.233(VII) ☐

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

.4 has not been approved ☐

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

2.4.3 The oil content meter has been approved in accordance with resolution A.393(X) ☐

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

2.6 Waiver of regulation 16

2.6.1 The requirements of regulation 16(1) or (2) are waived in respect of the ship in accordance with regulation 16(3)(a). The ship is engaged exclusively on:

.1 Voyages within special area(s): ..... ☐
.....
.....

.2 Voyages within 12 miles of the nearest land outside special area(s) restricted to:..... ☐
.....
.....

2.6.2 The ship is fitted with holding tank(s) having a volume of ....m^3 for the total retention on board of all oily bilge water ☐

3 MEANS FOR RETENTION AND DISPOSAL OF OIL RESIDUES (SLUDGE) (regulation 17)

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

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:
..... ☐

4 STANDARD DISCHARGE CONNECTION (regulation 19)

4.1 The ship is provided with a pipeline for the discharge of residues from machinery bilges to reception facilities, fitted with a standard discharge connection in accordance with regulation 19 /_/

5 SHIPBOARD OIL POLLUTION EMERGENCY PLAN (regulation 26)

5.1 The ship is provided with a shipboard oil pollution emergency plan in compliance with regulation 26 /_/

6 EXEMPTION

6.1 Exemptions have been granted by the Administration from the requirements of chapter II of Annex I of the Convention in accordance with regulation 2(4)(a) on those items listed under paragraph(s).....
.....
.....of this Record /_/

7 EQUIVALENTS (regulation 3)

7.1 Equivalents have been approved by the Administration for certain requirements of Annex I 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)

.....19..... .....
(Signature of duly authorized officer issuing the Record)

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

FORM B
(Revised 1991)

SUPPLEMENT TO INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE
(IOPP CERTIFICATE)

RECORD OF CONSTRUCTION AND EQUIPMENT FOR OIL TANKERS

in respect of the provisions 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, 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.....(metric tons) (regulation 1(22))

1.7 Length of ship.....(m) (regulation 1(18))

1.8 Date of build:

1.8.1 Date of building contract.....

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 Status of ship:

1.10.1 New ship in accordance with regulation 1(6) ☐

1.10.2 Existing ship in accordance with regulation 1(7) ☐

1.10.3 New oil tanker in accordance with regulation 1(26) ☐

1.10.4 Existing oil tanker in accordance with regulation 1(27) ☐

1.10.5 The ship has been accepted by the Administration as an "existing ship" under regulation 1(7) due to unforeseen delay in delivery ☐

1.10.6 The ship has been accepted by the Administration as an "existing oil tanker" under regulation 1(27) due to unforeseen delay in delivery ☐

1.10.7 The ship is not required to comply with the provisions of regulation 24 due to the unforeseen delay in delivery ☐

1.11 Type of ship:

1.11.1 Crude oil tanker ☐

1.11.2 Product carrier ☐

1.11.3 Crude oil/product carrier ☐

1.11.4 Combination carrier ☐

1.11.5 Ship, other than an oil tanker, with cargo tanks coming under regulation 2(2) of Annex I of the Convention ☐

1.11.6 Oil tanker dedicated to the carriage of products referred to in regulation 15(7) /_/

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

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

1.11.9 Chemical tanker carrying oil /_/

2 EQUIPMENT FOR THE CONTROL OF OIL DISCHARGE FROM MACHINERY SPACE BILGES AND OIL FUEL TANKS (regulations 10 and 16)

2.1 Carriage of ballast water in oil fuel tanks

The ship may under normal conditions carry ballast water in oil fuel tanks /_/

2.2 Type of separating/filtering equipment fitted:

2.2.1 Oily-water separating equipment (100 ppm equipment) /_/

2.2.2 Oil filtering equipment (15 ppm equipment) /_/

2.3 Type of control system

2.3.1 Discharge monitoring and control system regulation 16(5)) /_/

.1 with automatic stopping device /_/

.2 with manual stopping device /_/

2.3.2 15 ppm alarm (regulation 16(7)) /_/

2.3.3 Automatic stopping device for discharges in special areas (regulation 10(3)(b)(vi)) /_/

2.3.4 Oil content meter (resolution A.444(XI)) /_/

.1 with recording device /_/

.2 without recording device /_/

2.4 Approval standards:

2.4.1 The separating/filtering system:

.1 has been approved in accordance with resolution A.393(X) /_/

.2 has been approved in accordance with resolution A.233(VII) /_/

.3 has been approved in accordance with national standards not based upon resolution A.393(X) or A.233(VII) /_/

.4 has not been approved /_/

2.4.2 The process unit has been approved in accordance with resolution A.444(XI) /_/

2.4.3 The oil content meter has been approved in accordance with resolution A.393(X) /_/

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

2.6 Waiver of regulation 16

2.6.1 The requirements of regulation 16(1) or (2) are waived in respect of the ship in accordance with regulation 16(3)(a). The ship is engaged exclusively on: /_/

.1 Voyages within special area(s): ..... /_/
.....
.....

.2 Voyages within 12 miles of the nearest land outside special area(s) restricted to:..... /_/
.....
.....

2.6.2 The ship is fitted with holding tank(s) having a volume of .....m^3 for the total retention on board of all oily bilge water /_/

2.6.3 In lieu of the holding tank the ship is provided with arrangements to transfer bilge water to the slop tank /_/

3 MEANS FOR RETENTION AND DISPOSAL OF OIL RESIDUES (SLUDGE) (regulation 17)

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

Tank 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 auxilliary 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: ..... ☐

4 STANDARD DISCHARGE CONNECTION (regulation 19)

4.1 The ship is provided with a pipeline for the discharge of residues from machinery bilges to reception facilities, fitted with a standard discharge connection in compliance with regulation 19 ☐

5 CONSTRUCTION (regulations 13, 24 and 25)

5.1 In accordance with the requirements of regulation 13, the ship is

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

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 13 ☐

5.2 Segregated ballast tanks (SBT)

5.2.1 The ship is provided with SBT in compliance with regulation 13 ☐

5.2.2 The ship is provided with SBT, in compliance with regulation 13, which are arranged in protective locations (PL) in compliance with regulation 13E ☐

5.2.3 SBT are distributed as follows:

Tank	Volume (m^3)	Tank	Volume (m^3)
		Total	

5.3 Dedicated clean ballast tanks (CBT)

5.3.1 The ship is provided with CBT in compliance with regulation 13A, and may operate as a product carrier ☐

5.3.2 CBT are distributed as follows:

Tank	Volume (m^3)	Tank	Volume (m^3)
		Total	

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 pump 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 13B ☐

5.4.2 The ship is equipped with a COW system in compliance with regulation 13B except that the effectiveness of the system has not been confirmed in accordance with regulation 13(6) and paragraph 4.2.10 of the Revised COW specifications (resolution A.446(XI)) ☐

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 Revised COW Specifications (resolution A.446(XI)) ☐

5.5 Exemption from regulation 13:

5.5.1 The ship is solely engaged in trade between ☐

.....
in accordance with regulation 13C and is therefore exempted from the requirements of regulation 13

5.5.2 The ship is operating with special ballast arrangements in accordance with regulation 13D and is therefore exempted from the requirements of regulation 13 ☐

5.6 Limitation of size and arrangements of cargo tanks (regulation 24)

5.6.1 The ship is required to be constructed according to, and complies with, the requirements of regulation 24 ☐

5.6.2 The ship is required to be constructed according to, and complies with, the requirements of regulation 24(4) (see regulation 2(2)) ☐

5.7 Subdivision and stability (regulation 25)

5.7.1 The ship is required to be constructed according to, and complies with, the requirements of regulation 25 ☐

5.7.2 Information and data required under regulation 25(5) have been supplied to the ship in an approved form ☐

6 RETENTION OF OIL ON BOARD (regulation 15)

6.1 Oil discharge monitoring and control system

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

Footnote: *Oil tankers the keels of which are laid, or which are at a similar stage of construction, on or after 2 October 1986 should be fitted with a system approved under resolution A.586(14)

6.1.2 The system comprises:

.1 control unit ☐

.2 computing unit ☐

.3 calculating unit ☐

6.1.3 The system is:

.1 fitted with a starting interlock ☐

.2 fitted with automatic stopping device ☐

6.1.4 The oil content meter is approved under the terms of resolution A.393(X) or A.586(14) (delete as appropriate) suitable for:

.1 crude oil ☐

.2 black products ☐

.3 white products ☐

.4 oil-like noxious liquid substances as listed in the attachment to the Certificate ☐

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

6.2 Slop tanks

6.2.1 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 15(2)(c) ☐

.2 regulation 15(2)(c)(i) ☐

.3 regulation 15(2)(c)(ii) ☐

.4 regulation 15(2)(c)(iii) ☐

6.2.2 Cargo tanks have been designated as slop tanks ☐

6.3 Oil/water interface detectors

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

6.4 Exemptions from regulation 15

6.4.1 The ship is exempted from the requirements of regulation 15(1), (2) and (3) in accordance with regulation 15(7) ☐

6.4.2 The ship is exempted from the requirements of regulation 15(1), (2) and (3) in accordance with regulation 2(2) ☐

6.5 Waiver of regulation 15

6.5.1 The requirements of regulation 15(3) are waived in respect of the ship in accordance with regulation 15(5)(b). The ship is engaged exclusively on:

.1 Specific trade under regulation 13C: ..... ☐
.....
.....

.2 Voyages within special area(s): ..... ☐
.....
.....

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

7 PUMPING, PIPING AND DISCHARGE ARRANGEMENTS (regulation 18)

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:*

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

7.2.1 above the waterline ☐

7.2.2 below the waterline ☐

7.3 The overboard discharge outlets, other than the discharge manifold, for dirty ballast water or oil contaminated water from cargo tank areas are located*:

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

7.3.1 above the waterline ☐

7.3.2 below the waterline in conjunction with the part flow arrangements in compliance with regulation 18(6)(e) ☐ ☐

7.3.3 below the waterline ☐

7.4 Discharge of oil from cargo pumps and oil lines (regulation 18(4) and (5))

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

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

.2 for discharge ashore a special small diameter line is provided ☐

8 SHIPBOARD OIL POLLUTION EMERGENCY PLAN (regulation 26)

8.1 The ship is provided with a shipboard oil pollution emergency plan in compliance with regulation 26 ☐

9 EQUIVALENT ARRANGEMENTS FOR CHEMICAL TANKERS CARRYING OIL

9.1 As equivalent arrangements for the carriage of oil by a chemical tanker, the ship is fitted with the following equipment in lieu of slop tanks (paragraph 6.2 above) and oil/water interface detectors (paragraph 6.3 above):

9.1.1 oily-water separating equipment capable of producing effluent with oil content less than 100 ppm, with the capacity of .....m^3/h ☐

9.1.2 a holding tank with the capacity of.....m^3 ☐

9.1.3 a tank for collecting tank washings which is:

.1 a dedicated tank ☐

.2 a cargo tank designated as a collecting tank ☐

9.1.4 a permanently installed transfer pump for overboard discharge of effluent containing oil through the oily-water separating equipment ☐

9.2 The oily-water separating equipment has been approved under the terms of resolution A.393(X) and is suitable for the full range of Annex I products ☐

9.3 The ship holds a valid Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk ☐

10 OIL-LIKE NOXIOUS LIQUID SUBSTANCES

The ship is permitted in accordance with regulation 14 of Annex II of the Convention to carry the oil-like noxious liquid substances specified in the list* attached. ☐

* The list of oil-like noxious substances permitted for carriage, signed, dated and certified by a seal or a stamp of the issuing authority shall be attached.

11 EXEMPTION

Exemptions have been granted by the Administration from the requirements of chapters II and III of Annex I of the Convention in accordance with regulation 2(4)(a) on those items listed under paragraph(s).....
.....
..... of this Record ☐

12 EQUIVALENTS (regulation 3)

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)

.....19....

.....
(Signature of duly authorized officer issuing the Record)

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

Appendix III of Annex I of MARPOL 73/78 is replaced by the following:

"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 tons gross tonnage and above and every ship of 400 tons gross tonnage and above, other than oil tankers, to record relevant machinery space operations. For oil tankers, Oil Record Book Part 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 in accordance with regulation 20 of Annex I of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78). The items have been grouped into operational sections, each of which is denoted by a letter code.

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

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

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

LIST OF ITEMS TO BE RECORDED

(A) BALLASTING OR CLEANING OF OIL FUEL TANKS

1. Identity of tank(s) ballasted.

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

3. Cleaning process:

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

.2 identify tank(s) in which one or another method has been employed (rinsing through, steaming, cleaning with chemicals; type and quantity of chemicals used);

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

4. Ballasting:

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

.2 quantity of ballast if tanks are not cleaned;

.3 position of ship at start of cleaning;

.4 position of ship at start of ballasting.

(B) DISCHARGE OF DIRTY BALLAST OR CLEANING WATER FROM OIL FUEL TANKS REFERRED TO UNDER SECTION (A)

5. Identity of tank(s).

6. Position of ship at start of discharge.

7. Position of ship on completion of discharge.

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

9. Method of discharge:

.1 through 100 ppm equipment;

.2 through 15 ppm equipment;

.3 to reception facilities.

10. Quantity discharged.

(C) COLLECTION AND DISPOSAL OF OIL RESIDUES (SLUDGE)

11. Collection of oil residues

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

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

- identity of tank(s) .....
- capacity of tank(s) ..... m^3
- total quantity of retention ..... m^3;

.2 other residues (such as oil residues resulting from drainages, leakages, exhausted oil, etc., in the machinery spaces), if applicable due to tank arrangement in addition to .1:

- identity of tank(s) .....
- capacity of tank(s) ..... m^3
- total quantity of retention ..... m^3.

12. Methods of disposal of residue

State quantity of oil residues disposed of, the tank(s) emptied and the quantity of contents retained:

.1 to reception facilities (identify port)[2/];

.2 transferred to another (other) tank(s) (indicate tank(s) and the total content of tank(s));

.3 incinerated (indicate total time of operation);

.4 other method (state which).

1/ Only in tanks listed in item 3 of Form A and B of the Supplement to the IOPP Certificate.

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

(D) NON-AUTOMATIC DISCHARGE OVERBOARD OR DISPOSAL OTHERWISE OF BILGE WATER WHICH HAS ACCUMULATED IN MACHINERY SPACES

13. Quantity discharged or disposed of.

14. Time of discharge or disposal (start and stop).

15. Method of discharge or disposal:

.1 through 100 ppm equipment (state position at start and end);

.2 through 15 ppm equipment (state position at start and end);

.3 to reception facilities (identify port)2/;

.4 transfer to slop tank or holding tank (indicate tank(s); state quantity transferred and the total quantity retained in tank(s)).

(E) AUTOMATIC DISCHARGE OVERBOARD OR DISPOSAL OTHERWISE OF BILGE WATER WHICH HAS ACCUMULATED IN MACHINERY SPACES

16. Time and position of ship at which the system has been put into automatic mode of operation for discharge overboard.

17. Time when the system has been put into automatic mode of operation for transfer of bilge water to holding tank (identify tank).

18. Time when the system has been put to manual operation.

19. Method of discharge overboard:

.1 through 100 ppm equipment;

.2 through 15 ppm equipment.

(F) CONDITION OF OIL DISCHARGE MONITORING AND CONTROL SYSTEM

20. Time of system failure.

21. Time when system has been made operational.

22. Reasons for failure.

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

(G) ACCIDENTAL OR OTHER EXCEPTIONAL DISCHARGES OF OIL

23. Time of occurrence.

24. Place or position of ship at time of occurrence.

25. Approximate quantity and type of oil.

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

(H) BUNKERING OF FUEL OR BULK LUBRICATING OIL

27. Bunkering

.1 Place of bunkering.

.2 Time of bunkering.

.3 Type and quantity of fuel oil and identity of tank(s) (state quantity added and total quantity of tank(s)).

.4 Type and quantity of lubricating oil and identity of tank(s) (state quantity added and total content of tank(s)).

(I) ADDITIONAL OPERATIONAL PROCEDURES AND GENERAL REMARKS

NAME OF SHIP .....

DISTINCTIVE NUMBER
OR LETTERS .....

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

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge

*Delete as appropriate

Signature of master .....

OIL RECORD BOOK

Part II - Cargo/ballast operations

(Oil tankers)

Name of ship:

Distinctive number
or letters:

Gross tonnage:

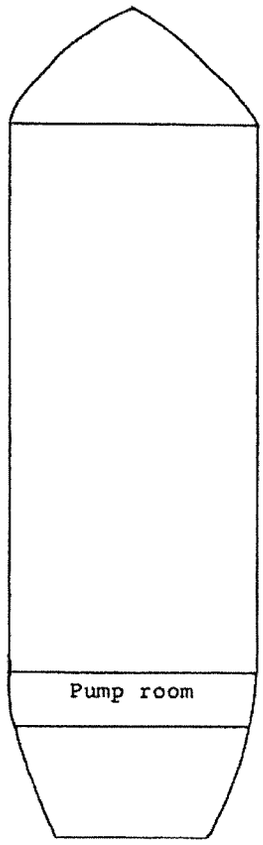
Period from: to:

Note: Every oil tanker of 150 tons 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 the tanks	Capacity
Depth of slop tank(s):	

(Give the capacity of each tank and the depth of slop tank(s)).

OIL RECORD BOOK - PART II

INTRODUCTION

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

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

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

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

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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 and the total content of tank(s)).

(B) INTERNAL TRANSFER OF OIL CARGO DURING VOYAGE

4. Identity of the tank(s)

.1 From:

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

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

(C) UNLOADING OF OIL CARGO

6. Place of unloading.

7. Identity of tank(s) unloaded.

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

(D) CRUDE OIL WASHING (COW TANKERS ONLY)
(To be completed for each tank being crude oil washed)

9. Port where crude oil washing was carried out or ship's position if carried out between two discharge ports.

10. Identity of tank(s) washed1/.

11. Number of machines in use.

12. Time of start of washing.

13. Washing pattern employed2/.

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.

14. Washing line pressure.

15. Time washing was completed or stopped.

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

17. Remarks[3/].

(E) BALLASTING OF CARGO TANKS

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

19. Ballasting process:

.1 identity of tank(s) ballasted;

.2 time of start and end;

.3 quantity of ballast received. Indicate total quantity of ballast for each tank involved in the operation.

(F) BALLASTING OF DEDICATED CLEAN BALLAST TANKS (CBT TANKERS ONLY)

20. Identity of tank(s) ballasted.

21. Position of ship when water intended for flushing, or port ballast was taken to dedicated clean ballast tank(s).

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

23. Quantity of the oily water which, after line flushing, is transferred to the slop tank(s) or cargo tank(s) in which slop is preliminarily stored (identify tank(s)). State the total quantity.

24. Position of ship when additional ballast water was taken to dedicated clean ballast tank(s).

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

26. Quantity of clean ballast taken on board.

(G) CLEANING OF CARGO TANKS

27. Identity of tank(s) cleaned.

28. Port or ship's position.

29. Duration of cleaning.

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[5/];

.2 slop tank(s) or cargo tank(s) designated as slop tank(s) (identify tank(s); state quantity transferred and total quantity).

(H) DISCHARGE OF DIRTY BALLAST

32. Identity of tank(s).

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

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

35. Quantity discharged into the sea.

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

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

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

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

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

(I) DISCHARGE OF WATER FROM SLOP TANKS INTO THE SEA

41. Identity of slop tank(s).

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 of tank washings, dirty ballast, residues or oily mixtures transferred, together with the time and date of the transfer. This receipt or certificate, if attached to the Oil Record Book, may aid the master of the ship in proving that his ship was not involved in an alleged pollution incident. The receipt or certificate should be kept together with the Oil Record Book.

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

45. Ullage of total contents at start of discharge.

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

47. Bulk quantity discharged and rate of discharge.

48. Final quantity discharged and rate of discharge.

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

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

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

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

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

54. Confirm that all applicable valves in the ship's piping system have been closed on completion of discharge from the slop tanks.

(J) DISPOSAL OF RESIDUES AND OILY MIXTURES NOT OTHERWISE DEALT WITH

55. Identity of tank(s).

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

57. Method of the disposal:

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

.2 mixed with cargo (state quantity);

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

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

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

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

59. Identity of tank(s) discharged.

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

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

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

(L) DISCHARGE OF BALLAST FROM DEDICATED CLEAN BALLAST TANKS (CBT TANKERS ONLY)

63. Identity of tank(s) discharged.

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

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

66. Quantity discharged:

.1 into the sea; or

.2 to reception facility (identify port).

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

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

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

(M) CONDITION OF OIL DISCHARGE MONITORING AND CONTROL SYSTEM

70. Time of system failure.

71. Time when system has been made operational.

72. Reasons for failure.

(N) ACCIDENTAL OR OTHER EXCEPTIONAL DISCHARGES OF OIL

73. Time of occurrence.

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

75. Approximate quantity and type of oil.

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

(O) ADDITIONAL OPERATIONAL PROCEDURES AND GENERAL REMARKS

TANKERS ENGAGED IN SPECIFIC TRADES

(P) LOADING OF BALLAST WATER

77. Identity of tank(s) ballasted.

78. Position of ship when ballasted.

79. Total quantity of ballast loaded in cubic metres.

80. Remarks.

(Q) RE-ALLOCATION OF BALLAST WATER WITHIN THE SHIP

81. Reasons for re-allocation.

(R) BALLAST WATER DISCHARGE TO RECEPTION FACILITY

82. Port(s) where ballast water was discharged.

83. Name or designation of reception facility.

84. Total quantity of ballast water discharged in cubic metres.

85. Date, signature and stamp of port authority official.

NAME OF SHIP .....

DISTINCTIVE NUMBER
OR LETTERS .....

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

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge

*Delete as appropriate Signature of master .....

RESOLUTION MEPC.48(31)

adopted on 4 July 1991

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

(Designation of the Wider Caribbean area as a special area under Annex V 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 Committee,

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 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, at its thirty-first session, amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to the Annex of the 1978 Protocol, 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 4 October 1992, unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 4 April 1993 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 Annex V of the 1978 Protocol certified copies of the present resolution and the text of the amendments contained in the Annex;

5. FURTHER REQUESTS the Secretary-General to transmit to the Members of the Organization which are not Parties to Annex V of the 1978 Protocol copies of the resolution and its annex.

ANNEX

AMENDMENTS TO REGULATION 5 OF ANNEX V OF MARPOL 73/78
(DESIGNATION OF THE WIDER CARIBBEAN AREA
AS A SPECIAL AREA)

Regulation 5 - Disposal of Garbage within Special Areas

The introductory sentence in paragraph (1) is amended to read as follows:

"(1) For the purposes of this Annex the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the 'Gulfs area', the North Sea area, the Antarctic area and the Wider Caribbean Region, including the Gulf of Mexico and the Caribbean Sea, which are defined as follows:"

New subparagraph (h) is added to paragraph (1) as follows:

"(h) The Wider Caribbean Region, as defined in article 2, paragraph 1 of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (Cartagena de Indias, 1983), means the Gulf of Mexico and Caribbean Sea proper including the bays and seas therein and that portion of the Atlantic Ocean within the boundary constituted by the 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."

New subparagraph (b) of paragraph (2) is amended to read as follows:

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

New subparagraph (c) is added to paragraph (2) as follows:

"(c) disposal into the Wider Caribbean Region of food wastes which have been passed through a comminuter or grinder shall be made as far as practicable from land, but in any case not subject to regulation 4 not less than 3 nautical miles from the nearest land. Such comminuted or ground food wastes shall be capable of passing through a screen with openings no greater than 25 millimetres."

RESOLUTION MEPC.51(32)
adopted on 6 March 1992

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

(Discharge criteria of 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 Committee,

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 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),

RECALLING the objective of MARPOL 73/78 to achieve the complete elimination of intentional pollution of the marine environment by oil,

DESIRING in this regard to reduce even further operational pollution from ships,

HAVING CONSIDERED, at its thirty-second session, amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to the Annex of the 1978 Protocol, 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 6 January 1993, unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 6 July 1993 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. FURTHER REQUESTS the Secretary-General to transmit copies of the resolution and its Annex to the Members of the Organization which are not Parties to MARPOL 73/78.

ANNEX

AMENDMENTS TO ANNEX I OF MARPOL 73/78

The regulations of Annex I are amended as follows:

1 Regulation 9

.1 The existing text of paragraph (1)(a)(iv) is replaced by the following:

"(iv) The instantaneous rate of discharge of oil content does not exceed 30 litres per nautical mile".

.2 The existing text of paragraph (1)(b) is replaced by the following:

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

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

(ii) the ship is proceeding en route;

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

(iv) the ship has in operation equipment as required by regulation 16 of this Annex."

.3 Paragraph (4) is amended by deleting the entire second sentence, including subitems (a) - (d).

.4 A new paragraph (7) is added as follows:

"(7) In the case of a ship, referred to in regulation 16(6) of this Annex, not fitted with equipment as required by regulation 16(1) or 16(2) of this Annex, the provisions of paragraph 1(b) of this regulation will not apply until 6 July 1998 or the date on which the ship is fitted with such equipment, whichever is the earlier. Until this date any discharge from machinery space bilges into the sea of oil or oily mixtures from such a ship shall be prohibited except when all the following conditions are satisfied:

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

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

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

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

(e) the ship is proceeding en route;

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

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

A footnote should be added to paragraph (7)(g) as follows:

"* Reference is made to the Recommendation on International Performance Specifications for Oily-Water Separating Equipment and Oil Content Meters adopted by the Organization by resolution A.393(X)."

2 Regulation 10

.1 Paragraph (2)(b) is amended to read:

"(b) any discharge into the sea of oil or oily mixture from a ship of less than 400 tons gross tonnage, other than an oil tanker, shall be prohibited while in a special area, except when the oil content of the effluent without dilution does not exceed 15 parts per million".

.2 Paragraph (3)(b)(v) is amended by changing the cross-reference therein from 16(7) to 16(5).

3 Regulation 16

The existing text of this regulation is replaced by the following:

"Regulation 16

Oil discharge monitoring and control system and oil filtering equipment

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

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

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

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

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

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

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

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

(b) The Administration shall ensure that ships of less than 400 tons gross tonnage are equipped, as far as practicable, to retain on board oil or oily mixtures or discharge them in accordance with the requirements of regulation 9(1)(b) of this Annex.

(4) Oil filtering equipment referred to in paragraph (1) of this regulation shall be of a design approved by the Administration and shall be such as will ensure that any oily mixture discharged into the sea after passing through the system has an oil content not exceeding 15 parts per million. In considering the design of such equipment, the Administration shall have regard to the specification recommended by the Organization*.

(5) Oil filtering equipment referred to in paragraph (2) of this regulation shall be of a design approved by the Administration and shall be such as will ensure that any oily mixture discharged into the sea after passing through the system or systems has an oil content not exceeding 15 parts per million. It shall be provided with alarm arrangements to indicate when this level cannot be maintained. The system shall also be provided with arrangements such as will ensure that any discharge of oily mixtures is automatically stopped when the oil content of the effluent exceeds 15 parts per million. In considering the design of such equipment and arrangements, the Administration shall have regard to the specification recommended by the Organization*.

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

A footnote should be added to paragraphs (4) and (5) as follows:

"* Reference is made to the Recommendation on International Performance Specifications for Oily-Water Separating Equipment and Oil Content Meters adopted by the Organization by resolution A.393(X)."

4 Regulation 21

.1 Subparagraph (c) is amended by deleting the first five words, i.e., "in any special area and".

.2 Subparagraph (d) is deleted.

5 Forms A and B of Supplements to the IOPP Certificate

Items 2.2 and 2.3 in both Forms A and B of Supplements to the IOPP Certificate are replaced by the following:

"2.2 Type of oil filtering equipment fitted:

2.2.1 Oil filtering (15 ppm) equipment (regulation 16(4)) ☐

2.2.2 Oil filtering (15 ppm) equipment with alarm and automatic stopping device (regulation 16(5)) ☐

2.3 The ship is allowed to operate with the existing equipment until 6 July 1998 (regulation 16(6)) and fitted with:

2.3.1 Oily-water separating (100 ppm) equipment ☐

2.3.2 Oil filtering (15 ppm) equipment without alarm ☐

2.3.3 Oil filtering (15 ppm) equipment with alarm and manual stopping device ☐ "

RESOLUTION MEPC.52(32)
adopted on 6 March 1992

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

(New regulations 13F and 13G and related amendments to 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 Committee,

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 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 resolution A.675(16) on prevention of oil pollution,

RECOGNIZING the severity of marine pollution incidents resulting from tanker casualties,

DESIRING to improve the requirements for the design and construction of oil tankers to prevent oil pollution in the event of collision or grounding,

HAVING CONSIDERED, at its thirty-second session, amendments to the 1978 Protocol proposed and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to the Annex of the 1978 Protocol, 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 6 January 1993, unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 6 July 1993 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. FURTHER REQUESTS the Secretary-General to transmit copies of the resolution and its Annex to the Members of the Organization which are not Parties to MARPOL 73/78;

6. AGREES to develop as a matter of urgency:

(a) guidelines for approval of alternative methods of design and construction of oil tankers as called for in regulation 13F(5);

(b) guidelines for approval of alternative structural or operational arrangements as called for in regulation 13G(7); and

(c) guidelines for an enhanced programme of surveys and inspections as called for in regulation 13G(3).

ANNEX

AMENDMENTS TO ANNEX I OF MARPOL 73/78

Regulation 1

Definitions

The following new paragraph (8)(c) is inserted after the existing paragraph (8)(b):

"(c) Notwithstanding the provisions of subparagraph (a) of this paragraph, conversion of an existing oil tanker to meet the requirements of regulation 13F or 13G of this Annex shall not be deemed to constitute a major conversion for the purpose of this Annex."

New regulations 13F and 13G

The following new regulations 13F and 13G are inserted after the existing regulation 13E:

REGULATION 13F OF ANNEX I OF MARPOL 73/78

Prevention of oil pollution in the event of collision or stranding

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

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

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

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

(d) which have undergone a major conversion:

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

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

(iii) which is completed after 6 July 1996.

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

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

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

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

(a) Wing tanks or spaces

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

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

w = 2.0 m, whichever is the lesser.

The minimum value of w = 1.0 m.

(b) Double bottom tanks or spaces

At any cross-section the depth of each double bottom tank or space shall be such that the distance h between the bottom of the cargo tanks and the moulded line of the bottom shell plating measured at right angles to the bottom shell plating as shown in figure 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.

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

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

(d) The aggregate capacity of ballast tanks

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

(e) Suction wells in cargo tanks

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

(f) Ballast and cargo piping

Ballast piping and other piping such as sounding and vent piping to ballast tanks shall not pass through cargo tanks. Cargo piping and similar piping to cargo tanks shall not pass through ballast tanks. Exemptions to this requirement may be granted for short lengths of piping, provided that they are completely welded or equivalent.

(4) (a) Double bottom tanks or spaces as required by paragraph (3)(b) may be dispensed with, provided that the design of the tanker is such that the cargo and vapour pressure exerted on the bottom shell plating forming a single boundary between the cargo and the sea does not exceed the external hydrostatic water pressure, as expressed by the following formula:

$$f \cdot h_c \cdot \rho_c \cdot g + 100\Delta p \leq d_n \cdot \rho_s \cdot g$$

where:

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

ρ_c = maximum cargo density in t/m^3

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

ρ_s = density of sea water in t/m^3

Δp = maximum set pressure of pressure/vacuum valve provided for the cargo tank in bars

f = safety factor = 1.1

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

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

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

(5) Other methods of design and construction of oil tankers may also be accepted as alternatives to the requirements prescribed in paragraph (3), provided that such methods ensure at least the same level of protection against oil pollution in the event of collision or stranding and are approved in principle by the Marine Environment Protection Committee based on guidelines developed by the Organization.

(6) For oil tankers of 20,000 tons deadweight and above the damage assumptions prescribed in regulation 25(2)(b) shall be supplemented by the following assumed bottom raking damage:

(a) longitudinal extent:

(i) ships of 75,000 tons deadweight and above:

0.6 L measured from the forward perpendicular

(ii) ships of less than 75,000 tons deadweight:

0.4 L measured from the forward perpendicular

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

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

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

(a) at least be fitted with double bottom tanks or spaces having such a depth that the distance h specified in paragraph (3)(b) complies with the following:

$h = B/15$ (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 mid-ship flat bottom as shown in figure 3; and

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

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

with a minimum value of $w = 0.76$ m.

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

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

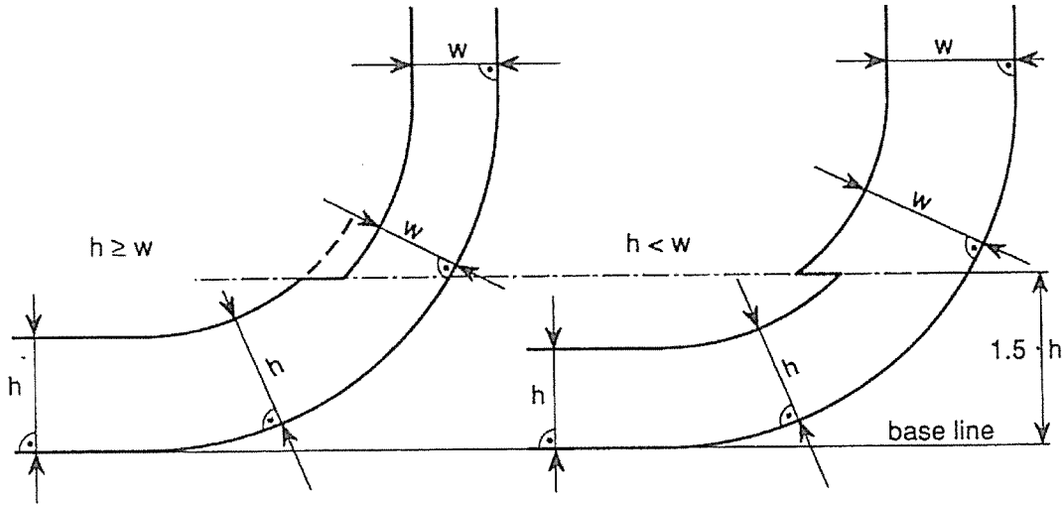


Figure 1

Cargo tank boundary lines for the purpose of paragraph (3)

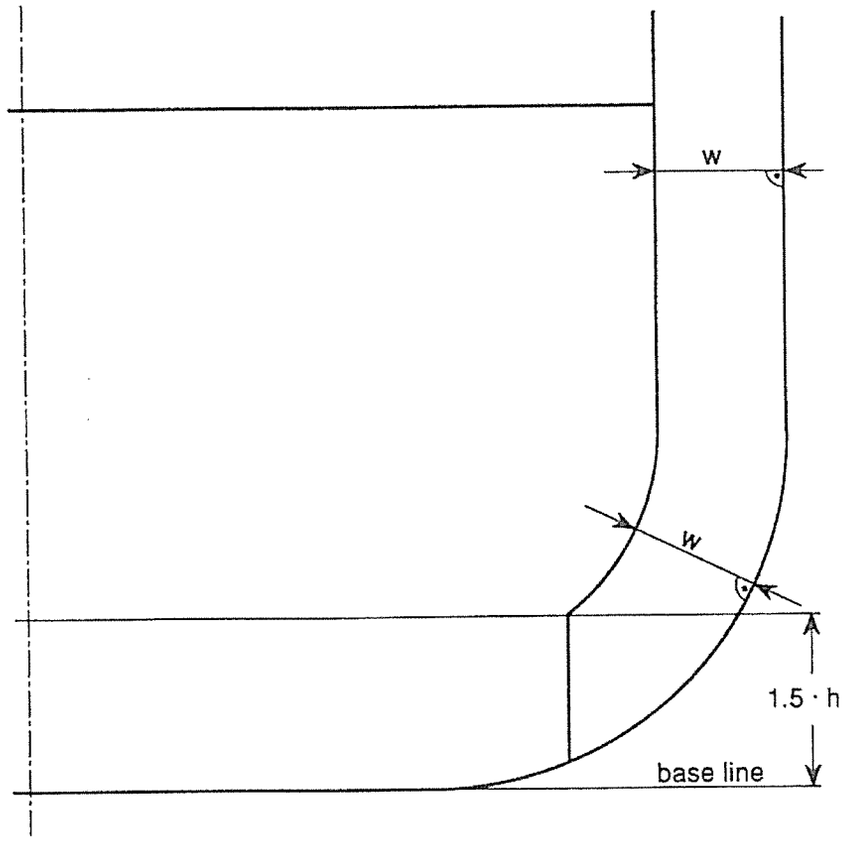


Figure 2

Cargo tank boundary lines for the purpose of paragraph (4)

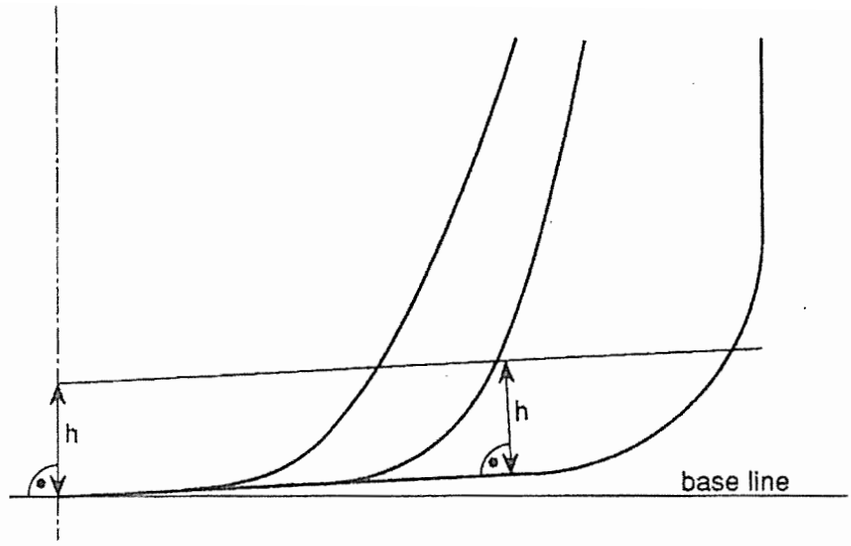


Figure 3

Cargo tank boundary lines for the purpose of paragraph (7)

REGULATION 13G OF ANNEX I OF MARPOL 73/78

Prevention of oil pollution in the event of collision or stranding

Measures for existing tankers

(1) This regulation shall:

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

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

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

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

(3) (a) An oil tanker to which this regulation applies shall be subject to an enhanced programme of inspections during periodical, intermediate and annual surveys, the scope and frequency of which shall at least comply with the guidelines developed by the Organization.

(b) An oil tanker over five years of age to which this regulation applies shall have on board, available to the competent authority of any Government of a State Party to the present Convention, a complete file of the survey reports, including the results of all scantling measurement required, as well as the statement of structural work carried out.

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

(4) An oil tanker not meeting the requirements of a new oil tanker as defined in regulation 1(26) of this Annex shall comply with the requirements of regulation 13F of this Annex not later than 25 years after its date of delivery, unless wing tanks or double bottom spaces, not used for the carriage of oil and meeting the width and height requirements of regulation 13E(4), cover at least 30% of L_t for the full depth of the ship on each side or at least 30% of the projected bottom shell area ΣPA_s within the length L_t, where L_t and the projected bottom shell area ΣPA_s are as defined in regulation 13E(2), in which case compliance with regulation 13F is required not later than 30 years after its date of delivery.

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

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

(7) Other structural or operational arrangements such as hydrostatically balanced loading may be accepted as alternatives to the requirements prescribed in paragraph (4), provided that such alternatives ensure at least the same level of protection against oil pollution in the event of collision or stranding and are approved by the Administration based on guidelines developed by the Organization.

Regulation 24(4)

Limitation of size and arrangement of cargo tanks

The existing text of paragraph (4) is replaced by the following:

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

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

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

but not to exceed 0.2 L

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

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

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

(i) for wing cargo tanks:

0.2 L

(ii) for centre cargo tanks:

(1) if $\frac{bi}{B}$ is equal to or greater than one fifth:

0.2 L

(2) if $\frac{bi}{B}$ is less than one fifth:

- Where no centreline longitudinal bulkhead is provided:

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

- Where a centreline longitudinal bulkhead is provided:

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

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

AMENDMENTS TO THE RECORD OF CONSTRUCTION AND EQUIPMENT FOR OIL TANKERS (FORM B)

The following new paragraph 5.8 is inserted after the existing paragraph 5.7:

"5.8 Double hull construction

5.8.1 The ship is required to be constructed according to regulation 13F and complies with the requirements of:

.1 paragraph (3) (double hull construction) ☐

.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 13F(7) (double bottom requirements) ☐

5.8.3 The ship is not required to comply with the requirements of regulation 13F ☐

5.8.4 The ship is subject to regulation 13G and:

.1 is required to comply with regulation 13F not later than ..... ☐

.2 is so arranged that the following tanks or spaces are not used for the carriage of oil ..... ☐

5.8.5 The ship is not subject to regulation 13G ☐ "

RESOLUTION MEPC.57(33)
(adopted on 30 October 1992)

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973
(Designation of the Antarctic area as a special area and lists of liquid substances in Annex II)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the function of 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 1973 Convention (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 FURTHER resolution MEPC.55(33) by which the Committee adopted amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code),

HAVING CONSIDERED, at its thirty-third session, amendments to Annex II of MARPOL 73/78 and appendices II and III thereof proposed by the Sub-Committee on Bulk Chemicals at its twenty-first session and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS in accordance with article 16(2)(d) of the 1973 Convention amendments to Annex II of MARPOL 73/78 and appendices II and III thereof, the texts of these amendments are 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 the date on which the conditions for the entry into force of the amendments to the IBC Code adopted by the Committee by resolution MEPC.55(33) are met, unless, prior to that date, not less than one third of the Parties or the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force six months after 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 Convention 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 the 1978 Protocol copies of the resolution and its annex.

ANNEX

TEXT OF AMENDMENTS TO ANNEX II OF MARPOL 73/78
AND APPENDICES II AND III

Regulation 1

The existing text of paragraph (6) is replaced by the following:

'Noxious liquid substance' means any substance referred to in appendix II to this Annex or provisionally assessed under the provisions of regulation 3(4) as falling into category A, B, C or D.

The existing text of the last sentence of paragraph (7) is amended to read as follows:

Special areas shall be:

(a) the Baltic Sea area, and

(b) the Black Sea area, and

(c) the Antarctic area.

A new paragraph (9A) is inserted reading:

(9A) The Antarctic area means the sea area south of latitude 60° S.

Regulation 2

The following new paragraph (7) is added:

(7) (a) Where an amendment to this Annex and to the International Bulk Chemical Code and the 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, having regard to the guidelines developed by the Organization.*

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* Reference is made to Guidelines for the application of amendments to the list of substances in Annex II of MARPOL 73/78 and the IBC Code and BCH Code with respect to pollution hazards approved by the Marine Environment Protection Committee of the Organization and issued under cover of MEPC/Circ.266.

(b) 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 carried, 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.

Regulation 3

The existing text of paragraph (3) is replaced by the following:

(3) Noxious liquid substances carried in bulk which are presently categorized as category A, B, C or D and subject to the provisions of this Annex are referred to in appendix II to this Annex.

Regulation 4

The existing text of paragraph (1) is replaced by the following:

(1) The substances referred to in appendix III to this Annex have been evaluated and found to fall outside category A, B, C and D, as defined in regulation 3(1) of this Annex because they are at present considered to present no harm to human health, marine resources, amenities or other legitimate uses of the sea, when discharged into the sea from tank cleaning or deballasting operation.

The existing text of paragraph (2) is replaced by the following:

(2) The discharge of bilge or ballast water or other residues or mixtures containing only substances referred to in appendix III to this Annex shall not be subject to any requirement of this Annex.

Regulation 5

The existing text of the wording preceding paragraphs (1) and (7) is amended to read as follows:

Subject to the provisions of paragraph (14) of this regulation and of regulation 6 of this Annex,

The second sentence of the existing text of paragraph (1) is amended to read:

If tanks containing such substances or mixtures are to be washed, the resulting residues shall be discharged to a reception facility until the concentration of the substance in the effluent to such facility is at or below 0.1% by weight and until the tank is empty, with the exception of phosphorus, yellow or white for which the residual concentration shall be at 0.01% by weight.

The existing text of the second sentence of paragraph (7) is amended to read as follows:

If tanks containing such substances or mixtures are to be washed, the resulting residues shall be discharged to a reception facility which the States bordering the special area shall provide in accordance with regulation 7 of this Annex, until the concentration of the substance in the effluent to such facility is at or below 0.05% by weight and until the tank is empty, with the exception of phosphorus, yellow or white for which the residual concentration shall be 0.005% by weight.

A new paragraph (14) is added as follows:

(14) In respect of the Antarctic area any discharge into the sea of noxious liquid substances or mixtures containing such substances shall be prohibited.

Regulation 8

The first and second sentences of the existing text of paragraph (3) is amended to read as follows:

If the tank is to be washed in accordance with subparagraph (2)(a) of this regulation, the effluent from the tank washing operation shall be discharged to a reception facility at least until the concentration of the substance in the discharge, as indicated by analyses of samples of the effluent taken by the surveyor, has fallen to the concentration specified in regulations 5(1) or 5(7), as applicable, of this Annex. When the required concentration has been achieved, remaining tank washings shall continue to be discharged to the reception facility until the tank is empty.

Regulation 14

In the second line the words "designated in Appendix II" are replaced by the words "referred to in appendix II".

Appendix II is replaced by the following:

Appendix II

LIST OF NOXIOUS SUBSTANCES CARRIED IN BULK

Noxious liquid substances carried in bulk and which are presently categorized as category A, B, C or D and subject to the provisions of this Annex, are so indicated in the pollution category column of chapters 17 or 18 of the International Bulk Chemical Code.

Appendix III is replaced by the following:

Appendix III

LIST OF OTHER LIQUID SUBSTANCES

Liquid substances carried in bulk which are identified as falling outside the category A, B, C or D and not subject to the provisions of this Annex are indicated as "III" in the pollution category column of chapters 17 or 18 of the International Bulk Chemical Code.

RESOLUTION MEPC.58(33)
(adopted on 30 October 1992)

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973 (Revised Annex III)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the function of 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 1973 Convention (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),

RECALLING ALSO that the Committee adopted resolution MEPC.35(27) on implementation of Annex III of MARPOL 73/78 by which it is stated, inter alia, that the revised provisions of Annex III can be treated as equivalent to the existing provisions and hence nothing in MARPOL 73/78 will prevent Parties to Annex III from giving effect to the revised provisions of Annex III without awaiting the formal entry into force of the revised provisions,

RECALLING FURTHER that the Committee decided to commence action to amend Annex III to MARPOL 73/78 in accordance with article 16 of MARPOL 73/78, immediately upon the entry into force,

NOTING ALSO that the existing provisions of Annex III of MARPOL 73/78 already came into force on 1 July 1992,

HAVING CONSIDERED, the amendments to Annex III of MARPOL 73/78, which were agreed at its twenty-sixth session, modified at its thirtieth and thirty-first sessions and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS in accordance with article 16(2)(d) of the 1973 Convention amendments to Annex III 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 30 August 1993, unless, prior to that date, not less than one third of the Parties or the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 28 February 1994 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 Annex III of the 1978 Protocol 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 Annex III of the 1978 Protocol copies of the resolution and its annex.

ANNEX

The existing text of Annex III is replaced by the following:

ANNEX III

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.

1.1 For the purposes of this Annex, "harmful substances" are those substances which are identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code).*

1.2 Guidelines for the identification of harmful substances in packaged form are given in the appendix to this Annex.

1.3 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 ships' stores and equipment.

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* Reference is made to the International Maritime Dangerous Goods Code (IMDG Code) adopted by the Organization by resolution A.716(17) as it has been or may be 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 with the correct technical name (trade names alone shall not be used) and, further, shall be durably marked or labelled to indicate that the substance is a marine pollutant. Such identification shall be supplemented where possible by any other means, for example, by use of the relevant United Nations number.

2 The method of marking the correct technical name and of affixing labels on packages containing a harmful substance shall be such that this information will still be identifiable on packages surviving at least three months' immersion in the sea. In considering suitable marking and labelling, account shall be taken of the durability of the materials used and of the surface of the package.

3 Packages containing small quantities of harmful substances may be exempted from the marking requirements.*

Regulation 4**

Documentation

1 In all documents relating to the carriage of harmful substances by sea where such substances are named, the correct technical name of each such substance shall be used (trade names alone shall not be used) and the substance further identified by the addition of the words "MARINE POLLUTANT".

2 The shipping documents supplied by the shipper shall include, or be accompanied by, a signed certificate or declaration that the shipment offered for carriage is properly packaged and marked, labelled or placarded as appropriate and in proper condition for carriage to minimize the hazard to the marine environment.

3 Each ship carrying harmful substances shall have a special list or manifest setting forth the harmful substances on board and the location thereof. A detailed stowage plan which sets out the location of the harmful substances on board may be used in place of such special list or manifest.

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* Reference is made to the specific exemptions provided for in the International Maritime Dangerous Goods Code (IMDG Code).

** 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.

Copies of such documents shall also be retained on shore by the owner of the ship or his representative until the harmful substances are unloaded. A copy of one of these documents shall be made available before departure to the person or organization designated by the port State authority.

4 When the ship carries a special list or manifest or a detailed stowage plan, required for the carriage of dangerous goods by the International Convention for the Safety of Life at Sea, 1974, as amended, the documents required by this regulation may be combined with those for dangerous goods. Where documents are combined, a clear distinction shall be made between dangerous goods and harmful substances covered by this Annex.

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 equipmemt of the ship, as well as the packaging and the inherent nature of the substances.

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.

Appendix

GUIDELINES 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:

- bioaccumulated to a significant extent and known to produce a hazard to aquatic life or to human health (hazard rating "+" in column A*); or

- bioaccumulated with attendant risk to aquatic organisms or to human health with a short retention of the order of one week or less (hazard rating "Z" in column A*); or

- liable to produce tainting of seafood (hazard rating "T" in column A*); or

- highly toxic to aquatic life, defined by a LC_{50}/96 hour** less than 1 ppm (hazard rating "4" in column B*).

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* Reference is made to the Composite List of Hazard Profiles, prepared by the IMO/FAO/UNESCO/WMO/WHO/IAEA/UN/UNEP Joint Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP) which is circulated annually by the Organization by means of BCH circulars to all IMO Member States.

** The concentration of a substance which will, within the specified time (generally 96 hours), kill 50% of the exposed group of test organisms. LC_{50} is often specified in mg/l (parts per million (ppm)).

RESOLUTIONS ADOPTED BY THE CONFERENCE OF PARTIES TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO, ON 2 NOVEMBER 1994

RESOLUTION 1

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

(Amendments to Annexes I and II on port State control on operational requirements)

THE CONFERENCE,

RECALLING article 16(3) 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 "MARPOL 73/78") concerning the procedure for amending MARPOL 73/78 by a Conference of Parties,

HAVING CONSIDERED amendments to Annexes I and II of MARPOL 73/78 proposed and circulated to the Members of the Organization and all Parties to MARPOL 73/78,

1. ADOPTS, in accordance with article 16(3) of MARPOL 73/78, amendments to Annexes I and II 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(3)(c) of MARPOL 73/78, that the amendments shall be deemed to have been accepted on 3 September 1995 unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES Parties to note that, in accordance with article 16(3)(c) of MARPOL 73/78, the amendments shall enter into force on 3 March 1996 upon their acceptance in accordance with paragraph 2 above.

ANNEX

Amendments to Annexes I and II of MARPOL 73/78

1 The following new regulation 8A is inserted after the existing regulation 8 of Annex I.

"Regulation 8A

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 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 "

2 The following new regulation 15 is added to the existing regulations of Annex II:

"Regulation 15

Port State control on operational requirements

(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.

(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."

RESOLUTION 2

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

(Amendments to Annex III on port State control on operational requirements)

THE CONFERENCE,

RECALLING article 16(3) 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 "MARPOL 73/78") concerning the procedure for amending MARPOL 73/78 by a Conference of Parties,

HAVING CONSIDERED amendments to Annexes III of MARPOL 73/78 proposed and circulated to the Members of the Organization and all Parties to MARPOL 73/78,

1. ADOPTS, in accordance with article 16(3) of MARPOL 73/78, amendments to Annex III 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(3)(c) of MARPOL 73/78, that the amendments shall be deemed to have been accepted on 3 September 1995 unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES Parties to note that, in accordance with article 16(3)(c) of MARPOL 73/78, the amendments shall enter into force on 3 March 1996 upon their acceptance in accordance with paragraph 2 above

ANNEX

Amendments to Annex III of MARPOL 73/78

The following new regulation 8 is added to the existing regulations of Annex III.

"Regulation 8

Port State control on operational requirements

(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 harmful substances.

(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 "

RESOLUTION 3

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

(Amendments to Annex V on port State control on operational requirements)

THE CONFERENCE,

RECALLING article 16(3) 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 "MARPOL 73/78") concerning the procedure for amending MARPOL 73/78 by a Conference of Parties,

HAVING CONSIDERED amendments to Annex V of MARPOL 73/78 proposed and circulated to the Members of the Organization and all Parties to MARPOL 73/78,

1. ADOPTS, in accordance with article 16(3) of MARPOL 73/78, amendments to Annex 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(3)(c) of MARPOL 73/78, that the amendments shall be deemed to have been accepted on 3 September 1995 unless prior to this date one third or more of the Parties, or the Parties the combined merchant fleets of which constitute fifty per cent or more of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES Parties to note that, in accordance with article 16(3)(c) of MARPOL 73/78, the amendments shall enter into force on 3 March 1996 upon their acceptance in accordance with paragraph 2 above.

ANNEX

Amendments to Annex V of MARPOL 73/78

4 The following new regulation 8 is added to the existing regulation of Annex V

"Regulation 8

Port State control on operational requirements

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

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

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

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

RESOLUTION MEPC.65(37)
(adopted on 14 September 1995)

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 2 and new Regulation 9 of Annex V)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the function of 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 1973 Convention (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confers 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 there is a need to provide for a more effective implementation of Annex V of MARPOL 73/78,

REQUIRING a more systematic approach to the enforcement and control of the requirements of Annex V, MARPOL 73/78,

HAVING CONSIDERED the amendments to Annex V of MARPOL 73/78, agreed at its thirty-sixth session and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(b) of the 1973 Convention, amendments to Annex 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 January 1997, unless prior to the date, not less than one-third of the Parties or the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that in accordance with article 16(2)(g)(ii) of the 1973 Convention the amendments shall enter into force on 1 July 1997 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 Annex V of the 1978 Protocol 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 Annex V of the 1978 Protocol copies of the resolution and its annex.

ANNEX

TEXTS OF AMENDMENTS TO ANNEX V OF MARPOL 73/78

Regulation 2

Application

The existing text of regulation 2 is replaced by the following:

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

New regulation 9 is added as follows:

Regulation 9

Placards, garbage management plans and garbage record-keeping

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

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

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

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

(a) each discharge operation, or completed incineration, shall be recorded in the Garbage Record Book and signed for on the date of the incineration or discharge by the officer in charge. Each completed page of the Garbage Record Book shall be signed by the master of the ship. The entries in the Garbage Record Book shall be both in an official language of the State whose flag the ship is entitled to fly, and in English or French. The entries in an official national language of the State whose flag the ship is entitled to fly shall prevail in case of a dispute or discrepancy;

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

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

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

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

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

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

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

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

Appendix is added to the Annex as follows:

APPENDIX

FORM OF GARBAGE RECORD BOOK

Name of ship: _____

Distinctive number or letters _____

IMO No._____

Period: From:_____To:_____

1. Introduction

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

2. Garbage and garbage management:

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

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

3 Description of the garbage

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

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

4. Entries in the Garbage Record Book

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

(a) When garbage is discharged into the sea:

(i) Date and time of discharge
(ii) Position of the ship (latitude and longitude)
(iii) Category of garbage discharged
(iv) Estimated amount discharged for each category in m^3
(v) Signature of the officer in charge of the operation.

(b) When garbage is discharged to reception facilities ashore or to other ships:

(i) Date and time of discharge
(ii) Port or facility, or name of ship
(iii) Category of garbage discharged
(iv) Estimated amount discharged for each category in m^3
(v) Signature of officer in charge of the operation

(c) When garbage is incinerated:

(i) Date and time of start and stop of incineration
(ii) Position of the ship (latitude and longitude)
(iii) Estimated amount incinerated in m^3
(iv) Signature of the officer in charge of the operation.

(d) Accidental or other exceptional discharges of garbage

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

4.2 Receipts

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

4.3 Amount of garbage

The amount of garbage onboard should be estimated in m^3, 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:

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

NOTE: THE DISCHARGE OF ANY GARBAGE OTHER THAN FOOD WASTE IS PROHIBITED IN SPECIAL AREAS. ONLY GARBAGE DISCHARGED INTO THE SEA MUST BE CATEGORIZED. GARBAGE OTHER THAN CATEGORY 1 DISCHARGED TO RECEPTION FACILITIES NEED ONLY BE LISTED AS A TOTAL ESTIMATED AMOUNT.

Date/time	Position of the Ship	Estimated Amount Discharged into Sea (m^3)					Estimated Amount Discharged to Reception Facilities or to other ship (m^3)		Estimated Amount Incinerated (m^3)	Certification/ Signature
		CAT.2	CAT.3	CAT.4	CAT.5	CAT.6	CAT.1	Other		

Master's Signature: _____ Date: _____

RESOLUTION MEPC.68(38)
adopted on 10 July 1996

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1978 RELATING TO THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973
(Amendments to Protocol I)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the function of 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 1973 Convention (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confers 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 there is a need for more precise requirements with regard to when to make reports in article II of Protocol I, Provisions concerning Reports of Incidents Involving Harmful Substances, of the 1973 Convention,

HAVING CONSIDERED the amendments to article II of Protocol I of the 1973 Convention, agreed at its thirty-seventh session and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(b) of the 1973 Convention, amendments to Protocol 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 July 1997, unless prior to the date, not less than one-third of the Parties or the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that in accordance with article 16(2)(g)(ii) of the 1973 Convention the amendments shall enter into force on 1 January 1998 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 1978 Protocol 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 1978 Protocol copies of the resolution and its Annex.

ANNEX

TEXT OF AMENDMENTS TO PROTOCOL OF MARPOL 73/78

Existing text of article II(1) shall be replaced by the following:

"(1) The report shall be made when an incident involves:

(a) a discharge above the permitted level or probable discharge of oil or of noxious liquid substances for whatever reason including those for the purpose of securing the safety of the ship or for saving life at sea; or

(b) a discharge or probable discharge of harmful substances in packaged form, including those in freight containers, portable tanks, road and rail vehicles and shipborne barges; or

(c) damage, failure or breakdown of a ship of 15 metres in length or above which:

(i) affects the safety of the ship; including but not limited to collision, grounding, fire, explosion, structural failure, flooding, and cargo shifting; or

(ii) results to impairment of the safety of navigation; including but not limited to, failure or breakdown of steering gear, propulsion plant, electrical generating system, and essential shipborne navigational aids; or

(d) a discharge during the operation of the ship of oil or noxious liquid substances in excess of the quantity or instantaneous rate permitted under the present Convention."

RESOLUTION MEPC.75(40)
adopted on 25 September 1997

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 10 and new regulation 25A of 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 function of 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 1973 Convention (hereinafter referred to as the "1978 Protocol") which together specify the amendment procedure of the 1978 Protocol and confers 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),

CONSIDERING the proposal of the littoral States to make North West European waters a special area under Annex I of MARPOL 73/78,

RECOGNIZING that there is a need to specify intact stability criteria for double hull tankers by adding an appropriate regulation to Annex I of MARPOL 73/78,

HAVING CONSIDERED the proposed amendments to regulation 10 and new regulation 25A of Annex I of MARPOL 73/78, which were approved by the thirty-ninth session of the Committee and circulated in accordance with article 16(2)(a) of the 1973 Convention,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, amendments to Annex I 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 August 1998, unless prior to that date, not less than one-third of the Parties or the Parties, the combined merchant fleets of which constitute not less than fifty per cent of the gross tonnage of the world's merchant fleet, have communicated to the Organization their objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 1 February 1999 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 resolution and its Annex.

ANNEX

AMENDMENTS TO REGULATION 10 AND NEW REGULATION 25A OF ANNEX I OF MARPOL 73/78

1 The existing text of regulation 10 is amended as follows:

Regulation 10

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

.1 *The introductory part of paragraph (1) is replaced by the following.*

"(1) For the purpose of this Annex, the special areas are the Mediterranean Sea area, the Baltic Sea area, the Black Sea area, the Red Sea area, the "Gulfs area", the Gulf of Aden area, the Antarctic area and the North West European waters , which are defined as follows:".

.2 *The following new paragraph (1)(h) is added after existing paragraph (1)(g):*

"(h) 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:

(i) 48° 27'N on the French coast
(ii) 48° 27'N; 6° 25'W
(iii) 49° 52'N; 7° 44'W
(iv) 50° 30'N; 12°W
(v) 56° 30'N; 12°W
(vi) 62°N; 3°W
(vii) 62°N on the Norwegian coast
(viii) 57° 44.8'N on the Danish and Swedish coasts"

.3 *The introductory part of paragraph (7)(b) is replaced by the following:*

"(b) Red Sea area, Gulfs area, Gulf of Aden area and North West European waters: ".

2 The following new regulation 25A is added after existing regulation 25:

"Regulation 25A

Intact stability

(1) This regulation shall apply to oil tankers of 5,000 tons deadweight and above:

(a) for which the building contract is placed on or after 1 February 1999, or

(b) in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 August 1999, or

(c) the delivery of which is on or after 1 February 2002, or

(d) which have undergone a major conversion:

(i) for which the contract is placed after 1 February 1999; or

(ii) in the absence of a contract, the construction work of which is begun after 1 August 1999; or

(iii) which is completed after 1 February 2002.

(2) Every oil tanker shall comply with the intact stability criteria specified in subparagraphs (a) and (b) of this paragraph, 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.

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

(b) At sea, the following criteria shall be applicable:

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

(ii) the righting lever GZ shall be at least 0.20 m at an angle of heel equal to or greater than 30°;

(iii) the maximum righting arm shall occur at an angle of heel preferably exceeding 30° but not less than 25°; and

(iv) the initial metacentric height GMo, corrected for free surface measured at 0° heel, shall be not less than 0.15 m.

(3) The requirements of paragraph (2) shall be met through design measures. For combination carriers simple supplementary operational procedures may be allowed.

(4) Simple supplementary operational procedures for liquid transfer operations referred to in paragraph (3) shall mean written procedures made available to the master which:

(a) are approved by the Administration;

(b) 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;

(c) will be readily understandable to the officer-in-charge of liquid transfer operations;

(d) provide for planned sequences of cargo/ballast transfer operations;

(e) allow comparisons of attained and required stability using stability performance criteria in graphical or tabular form;

(f) require no extensive mathematical calculations by the officer-in-charge;

(g) 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

(h) 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."

RESOLUTION MEPC.78(43)

adopted on 1 July 1999

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 13G and 26 and IOPP Certificate of Annex I and addition of new regulation 16 to 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 function of 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 proposed amendments to make existing oil tankers between 20,000 and 30,000 tons deadweight carrying persistent product oil subject to the same construction requirements for crude oil tankers and the proposed amendments to the Supplement of the International Oil Pollution Prevention Certificate (IOPP Certificate),

HAVING ALSO CONSIDERED the proposed amendments to regulation 26 of Annex I and the proposed new regulation 16 of Annex II of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to Annexes I and II 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 2000, unless prior to the date, not less than one-third of the Parties or the 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 objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 1 January 2001 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 resolution and its Annex.

ANNEX

AMENDMENTS TO ANNEXES I AND II OF MARPOL 73/78

I AMENDMENTS TO ANNEX I OF MARPOL 73/78

Amendments to regulation 13G

1 The existing text of paragraph (1) (a) is replaced by the following:

"(1) This regulation shall:

(a) apply to

(i) oil tankers of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo; and

(ii) oil tankers of 30,000 tons deadweight and above other than those referred to in subparagraph (i),

which are contracted, the keels of which are laid, or which are delivered before the dates specified in regulation 13F(1) of this Annex; and"

2 The existing text of paragraph (2) is replaced by the following:

"(2) The requirements of this regulation shall take effect as from 6 July 1995, except that the requirements of paragraph (1) (a) applicable to oil tankers of 20,000 tons deadweight and above but less than 30,000 tons deadweight carrying fuel oil, heavy diesel oil or lubricating oil as cargo shall take effect as from 1 January 2003."

3 The following new paragraph (*2bis*) is inserted after paragraph (2):

"(*2bis*) For the purpose of paragraphs (1) and (2) of this regulation:

(a) "Heavy diesel oil" means marine diesel oil, other than those distillates of which more than 50 per cent by volume distils at a temperature not exceeding 340°C when tested by the method acceptable to the Organization.*

(b) "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.**"

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* Refer to the American Society for Testing and Materials' Standard Test Method (Designation D86).

** Refer to the American Society for Testing and Materials' Specification for Number Four Fuel Oil (Designation D396) or heavier.

Amendments to regulation 26

4 The following new paragraph (3) is added after the existing paragraph (2):

"In the case of ships to which regulation 16 of Annex II of the Convention also apply, such a plan may be combined with the shipboard marine pollution emergency plan for noxious liquid substances required under regulation 16 of Annex II of the Convention. In this case, the title of such a plan shall be "Shipboard marine pollution emergency plan"."

II AMENDMENTS TO THE IOPP CERTIFICATE UNDER ANNEX I OF MARPOL 73/78

1 Amendments to the Supplement to the IOPP Certificate (Form A)

The existing paragraphs 2.4 to 3.2 is replaced by the following:

"2.4 Approval Standards*:

2.4.1 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 A.233(VII) ☐

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

.5 has not been approved. ☐

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

2.4.3 The oil content meter:

*Refer to 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); see IMO sales publication IMO-608E. 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.

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

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

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

2.6 Waiver of regulation 16:

2.6.1 The requirements of regulation 16(1) and 16(2) are waived in respect of the ship in accordance with regulation 16(3)(a). The ship is engaged exclusively on voyages within special area(s): ..... ☐

2.6.2 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 17) 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:

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

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 fitted 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)

2 Amendments to the Supplement to the IOPP Certificate (Form B)

2.1 The following is added after the existing paragraph 1.11.2:

"1.11.2*bis* Product carrier not carrying fuel oil or heavy diesel oil as referred to in regulation 13G(2*bis*), or lubricating oil ☐."

2.2 The existing paragraphs 2.4 to 3.2 is replaced by the following:

"2.4 Approval Standards*:

2.4.1 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 A.233(VII) ☐

*Refer to 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); see IMO sales publication IMO-608E. 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.

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

.5 has not been approved ☐

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

2.4.3 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) ☐

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

2.6 Waiver of regulation 16:

2.6.1 The requirements of regulation 16(1) and 16(2) are waived in respect of the ship in accordance with regulation 16(3)(a). The ship is engaged exclusively on voyages within special area(s):..... ☐

2.6.2 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)

2.6.3 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 17) 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 fitted 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)

"

2.3 The following is added after existing paragraph 5.7.2:

"5.7.3 The ship is required to be constructed according to, and complies with the requirements of regulation 25A. ☐

5.7.4 Information and data required under regulation 25A for combination carriers have been supplied to the ship in a written procedure approved by the Administration. ☐"

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

2.4 The existing paragraph 5.8.4 is replaced by the following:

"5.8.4 The ship is subject to regulation 13G and:

.1 is required to comply with regulation 13F not later than ..... ☐

.2 is so arranged that the following tanks or spaces are not used for the carriage of oil ..... ☐

.3 has been accepted in accordance with regulation 13G(7) and resolution MEPC.64(36) ☐

.4 is provided with the operational manual approved on ..... in accordance with resolution MEPC.64(36). ☐"

III AMENDMENTS TO ANNEX II OF MARPOL 73/78

The following new regulation 16 is added after the existing regulation 15:

"Regulation 16

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. This requirement shall apply to all such ships not later than 1 January 2003.

(2) Such a plan shall be in accordance with 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:

(a) 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**;

(b) the list of authorities or persons to be contacted in the event of a noxious liquid substance pollution incident;

(c) 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

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

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*Refer to "Guidelines for the development of shipboard marine pollution emergency plans for oil and/or noxious liquid substances".

** 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).

(3) In the case of ships to which regulation 26 of Annex I of the Convention also apply, such a plan may be combined with the shipboard oil pollution emergency plan required under regulation 26 of Annex I of the Convention. In this case, the title of such a plan shall be "Shipboard marine pollution emergency plan"."

RESOLUTION MEPC.84(44)
Adopted on 13 March 2000

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

(Amendments to the Appendix to Annex III of MARPOL 73/78)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the function of 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 proposed amendments to the Appendix to Annex III of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2) (d) of the 1973 Convention, the amendments to the Appendix 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 2001, unless prior to that date, not less than one-third of the Parties or the 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 objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 1 January 2002 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 resolution and its Annex.

ANNEX

AMENDMENTS TO THE APPENDIX TO ANNEX III OF MARPOL 73/78

The clause "-liable to produce tainting of seafood (Hazard Rating "T" in column A*); or" is deleted from the Appendix to Annex III of MARPOL 73/78.

RESOLUTION MEPC.89(45)

Adopted on 5 October 2000

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

(Amendments to Annex V of MARPOL 73/78)

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING article 38(a) of the Convention on the International Maritime Organization concerning the function of 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 resolution MEPC.87(44) by which the Committee agreed on the use of Spanish under IMO conventions relating to pollution prevention,

HAVING CONSIDERED the proposed amendments to Annex V of MARPOL 73/78, which were approved by the forty-fourth session of the Committee and circulated in accordance with article 16 (2) (a) of the 1973 Convention,

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 September 2001, unless prior to the date, not less than one-third of the Parties or the Parties 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 objections to the amendments;

3. INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of the 1973 Convention, the amendments shall enter into force on 1 March 2002 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 resolution and its Annex.

ANNEX

AMENDMENTS TO ANNEX V OF MARPOL 73/78

1 The existing paragraph (2) of regulation 1 is replaced by the following:

"*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 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

2 The existing paragraph (1)(a) of regulation 3 is replaced by the following:

"the disposal 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 which may contain toxic or heavy metal residues, is prohibited."

3 The existing paragraph (2)(a)(i) of regulation 5 is replaced by the following:

"all plastics, including but not limited to synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products which may contain toxic or heavy metal residues; and"

4 The existing paragraph (1)(b) of regulation 9 is replaced by the following:

"The placards shall be written in the working language of the ship's personnel 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."

5 The existing paragraph (3)(a) of regulation 9 is replaced by the following:

"Each discharge operation, or completed incineration, shall be recorded in the Garbage Record Book and signed for on the date of the incineration or discharge by the officer in charge. Each completed page of the Garbage Record Book shall be signed by the master of the ship. The entries in the Garbage Record Book shall be 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 are also used, these entries shall prevail in case of a dispute or discrepancy;"

6 The existing Record of Garbage Discharges contained in the appendix is replaced by the following:

"RECORD OF GARBAGE DISCHARGES

Ship's name : _____ Distinctive No, or letters : _____ IMO No : _____

Garbage categories :

1. Plastic
2. Floating dunnage, lining or packing materials
3. Ground paper products, rags, glass, metal, bottles, crockery, etc.
4. Paper products, rages, glass, metal, bottles, crockery, etc.
5. Food waste
6. Incinerator ash except from plastic products which may contain toxic or heavy metal residues

NOTE : THE DISCHARGE OF ANY GARBAGE OTHER THAN FOOD WASTE IS PROHIBITED IN SPECIAL AREAS. ONLY GARBAGE DISCHARGED INTO THE SEA MUST BE CATEGORIZED. GARBAGE OTHER THAN CATEGORY 1 DISCHARGED TO RECEPTION FACILITIES NEED ONLY BE LISTED AS A TOTAL ESTIMATED AMOUNT.

Date/time	Position of the ship	Estimated amount discharged into sea (m^3)					Estimated amount discharged to reception facilities or to other ship (m^3)		Estimated amount incinerated (m^3)	Certification/ Signature
		Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6	Cat. 1	Other		

Master's signature: _____ Date : _____ "

RESOLUTION MEPC.95(46)

Adopted on 27 April 2001

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 13G of Annex I to MARPOL 73/78 and to the Supplement to the IOPP 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 (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 proposed amendments to regulation 13G of Annex I to MARPOL 73/38, which were approved by the forty-fifth session of the Committee and circulated in accordance with article 16 (2) (a) of the 1973 Convention,

HAVING ALSO CONSIDERED the proposed amendments to the Supplement to the IOPP Certificate which are consequential amendments to the proposed amendments to regulation 13G of Annex I to MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to regulation 13G of Annex I to MARPOL 73/78 and to the Supplement to the IOPP Certificate, 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 March 2002, 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 September 2002 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 ANNEX I TO MARPOL 73/78

1 *The existing text of regulation 13G is replaced by the following:*

"Regulation 13G

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

(1) This regulation shall:

(a) apply to oil tankers of 5,000 tons deadweight and above, which are contracted, the keels of which are laid, or which are delivered before the dates specified in regulation 13F(1) of this Annex; and

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

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

(2) For the purpose of this regulation:

(a) "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 340°C when tested by the method acceptable to the Organization

(b) "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.

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

(a) "Category 1 oil tanker" means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which does not comply with the requirements for new oil tankers as defined in regulation 1(26) of this Annex;

(b) "Category 2 oil tanker" means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which complies with the requirements for new oil tankers as defined in regulation 1(26) of this Annex;

(c) "Category 3 oil tanker" means an oil tanker of 5,000 tons deadweight and above but less than that specified in subparagraph (a) or (b) of this paragraph.

(4) An oil tanker to which this regulation applies shall comply with the requirements of regulation 13F of this Annex not later than the anniversary of the date of delivery of the ship in the year specified in the following table:

Category of oil tanker	Year
Category 1	2003 for ships delivered in 1973 or earlier 2004 for ships delivered in 1974 and 1975 2005* for ships delivered in 1976 and 1977 2006* for ships delivered in 1978, 1979 and 1980 2007* for ships delivered in 1981 or later
Category 2	2003 for ships delivered in 1973 or earlier 2004 for ships delivered in 1974 and 1975 2005 for ships delivered in 1976 and 1977 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 2011* for ships delivered in 1985 2012* for ships delivered in 1986 2013* for ships delivered in 1987 2014* for ships delivered in 1988 2015* for ships delivered in 1989 or later
Category 3	2003 for ships delivered in 1973 or earlier 2004 for ships delivered in 1974 and 1975 2005 for ships delivered in 1976 and 1977 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 2011 for ships delivered in 1985 2012 for ships delivered in 1986 2013 for ships delivered in 1987 2014 for ships delivered in 1988 2015 for ships delivered in 1989 or later

* Subject to compliance with the provisions of paragraph (7).

(5) Notwithstanding the provisions of paragraph (4) of this regulation:

(a) 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 does not fulfil conditions for being exempted from the provisions of paragraph (1)(c) 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:

(i) the ship was in service on 1 July 2001;

(ii) the Administration is satisfied by verification of the official records that the ship complied with the conditions specified above;

(iii) the conditions of the ship specified above remain unchanged; and

(iv) such continued operation does not go beyond the date on which the ship reaches 25 years after the date of its delivery;

(b) in the case of a Category 2 or 3 oil tanker other than that referred to in sub- paragraph (a) of this paragraph which complies with the provisions of paragraph (6)(a) or (b) 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 such continued operation shall not go beyond the anniversary of the date of delivery of the ship in 2017 or the date on which the ship reaches 25 years after the date of its delivery, whichever is the earlier date.

(6) A Category 1 oil tanker of 25 years and over after the date of its delivery shall comply with either of the following provisions:

(a) wing tanks or double bottom spaces, not used for the carriage of oil and meeting the width and height requirements of regulation 13E(4), cover at least 30% of L_t, for the full depth of the ship on each side or at least 30% of the projected bottom shell area within the length L_t, where L_t is as defined in regulation 13E(2); or

(b) the tanker operates with hydrostatically balanced loading, taking into account the guidelines developed by the Organization

(7) The Administration may allow continued operation of a Category 1 oil tanker beyond the anniversary of the date of delivery of the ship in 2005, and of a Category 2 oil tanker beyond the anniversary of the date of delivery of the ship in 2010, subject to compliance with the Condition Assessment Scheme adopted by the Marine Environment Protection Committee by resolution MEPC.94(46), as may be 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.

(8) (a) The Administration of a State 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.

(b) A Party to the present Convention shall be entitled to deny entry of oil tankers operating in accordance with the provisions of paragraph (5) of this regulation into the ports or offshore terminals under its jurisdiction. In such cases, that Party shall communicate to the Organization for circulation to the Parties to the present Convention particulars thereof for their information."

AMENDMENTS TO APPENDIX II TO ANNEX I TO MARPOL 73/78

Amendments to the Supplement to the IOPP Certificate (Form B)

2 *The existing paragraph 5.8.4 is replaced by the following*:

"5.8.4 The ship is subject to regulation 13G and:

.1 is required to comply with regulation 13F not later than ..... ☐

.2 is so arranged that the following tanks or spaces are not used for the carriage of oil ..... ☐

.3 is provided with the operational manual approved on ..... in accordance with resolution MEPC.64(36) ..... ☐

.4 is allowed to continue operation in accordance with regulation 13G(5)(a) ..... ☐

.5 is allowed to continue operation in accordance with regulation 13G(5)(b) ..... ☐

.6 is allowed to continue operation in accordance with regulation 13G(7) .....☐"

RESOLUTION MEPC.111(50)
adopted on 4 December 2003

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 13G, addition of new regulation 13H and consequential amendments to the Supplement to the IOPP Certificate of Annex I to 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 proposed amendments to regulation 13G and consequential amendments to the Supplement (Form B) of the IOPP Certificate of Annex I to MARPOL 73/38,

HAVING ALSO CONSIDERED the proposed new regulation 13H of Annex I to 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, the text of which is set out at annexes 1, 2, 3 and 4 to the present resolution, each of which 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 amendments shall be deemed to have been accepted on 4 October 2004 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 5 April 2005 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 ANNEX I OF MARPOL 73/78

The existing regulation 13G is replaced by the following:

"Regulation 13G

Prevention of accidental oil pollution - Measures for existing oil tankers

(1) Unless expressly provided otherwise this regulation shall:

(a) apply to oil tankers of 5,000 tons deadweight and above, which are contracted, the keels of which are laid, or which are delivered before the dates specified in regulation 13F(1) of this Annex; and

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

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

(2) For the purpose of this regulation:

(a) "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 340°C when tested by the method acceptable to the Organization[1].

(b) "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:

(a) "Category 1 oil tanker" means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which does not comply with the requirements for new oil tankers as defined in regulation 1(26) of this Annex;

(b) "Category 2 oil tanker" means an oil tanker of 20,000 tons deadweight and above carrying crude oil, fuel oil, heavy diesel oil or lubricating oil as cargo, and of 30,000 tons deadweight and above carrying oil other than the above, which

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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.

complies with the requirements for new oil tankers as defined in regulation 1(26) of this Annex; and

(c) "Category 3 oil tanker" means an oil tanker of 5,000 tons deadweight and above but less than that specified in subparagraph (a) or (b) of this paragraph.

(4) An oil tanker to which this regulation applies shall comply with the requirements of regulation 13F 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)(c) 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:

(a) the ship was in service on 1 July 2001;

(b) the Administration is satisfied by verification of the official records that the ship complied with the conditions specified above;

(c) the conditions of the ship specified above remain unchanged; and

(d) 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) (a) 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.

(b) 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 :

(i) paragraph (5) of this regulation beyond the anniversary of the date of delivery of the ship in 2015; or

(ii) 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."

ANNEX 2

AMENDMENTS TO ANNEX I OF MARPOL 73/78

The following new regulation is added after regulation 13G:

"Regulation 13H

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

(1) This regulation shall:

(a) apply to oil tankers of 600 tons deadweight and above carrying heavy grade oil as cargo regardless of the date of delivery; and

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

(2) For the purpose of this regulation "heavy grade oil" means any of the following:

(a) crude oils having a density at 15° C higher than 900 kg/m^3;

(b) fuel oils having either a density at 15° C higher than 900 kg/m^3 or a kinematic viscosity at 50° C higher than 180 mm^2/s;

(c) 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 13G.

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

(a) if 5,000 tons deadweight and above, comply with the requirements of regulation 13F of this Annex not later than 5 April 2005; or

(b) if 600 tons deadweight and above but less than 5,000 tons deadweight, be fitted with both double bottom tanks or spaces complying with the provisions of regulation 13F(7)(a) of this Annex, and wing tanks or spaces arranged in accordance with regulation 13F(3)(a) and complying with the requirement for distance *w* as referred to in regulation 13F(7)(b), 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 tons 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)(b) 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:

(a) the ship was in service on 4 December 2003;

(b) the Administration is satisfied by verification of the official records that the ship complied with the conditions specified above;

(c) the conditions of the ship specified above remain unchanged; and

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

(6) (a) The Administration may allow continued operation of an oil tanker of 5,000 tons deadweight and above, carrying crude oil having a density at 15° C higher than 900 kg/m^3 but lower than 945 kg/m^3, beyond the date specified in paragraph (4)(a) of this regulation, if satisfactory results of the Condition Assessment Scheme referred to in regulation 13G(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.

(b) The Administration may allow continued operation of an oil tanker of 600 tons deadweight and above but less than 5,000 tons deadweight, carrying heavy grade oil as cargo, beyond the date specified in paragraph (4)(b) 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 tons deadweight and above carrying heavy grade oil as cargo from the provisions of this regulation if the oil tanker:

(a) 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

(b) 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) (a) The Administration of a Party to the present Convention which allows, suspends, withdraws or declines the application of paragraphs (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.

(b) 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.

ANNEX 3

AMENDMENTS TO FORM B OF THE SUPPLEMENT TO THE IOPP CERTIFICATE RELATING TO REVISED REGULATION 13G OF ANNEX I OF MARPOL 73/78

The existing paragraph 5.8.4 in Form B of the Supplement to the IOPP Certificate is replaced by the following:

"5.8.4 The ship is subject to regulation 13G and:

.1 is required to comply with regulation 13F not later than ..... ☐

.2 is so arranged that the following tanks or spaces are not used for the carriage of oil ..... ☐

.3 is allowed to continue operation in accordance with regulation 13G(5) until ..... ☐

.4 is allowed to continue operation in accordance with regulation 13G(7) until ..... ☐"

ANNEX 4

AMENDMENTS TO FORM B OF THE SUPPLEMENT TO THE IOPP CERTIFICATE RELATING TO NEW REGULATION 13H OF ANNEX I OF MARPOL 73/78

The following new paragraphs are added after paragraph 5.8.5 in the Form B of the Supplement to the IOPP Certificate:

"5.8.6 The ship is subject to regulation 13H and:

.1 is required to comply with regulation 13H(4) not later than ..... ☐

.2 is allowed to continue operation in accordance with regulation 13H(5) until ..... ☐

.3 is allowed to continue operation in accordance with regulation 13H(6)(a) until ..... ☐

.4 is allowed to continue operation in accordance with regulation 13H(6)(b) until ..... ☐

.5 is exempted from the provisions of regulation 13H in accordance with regulation 13H(7)(b) ☐

5.8.7 The ship is not subject to regulation 13H ☐"

RESOLUTION MEPC.115(51)

Adopted on 1 April 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 IV 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 revised Annex IV of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the revised Annex IV 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 revised Annex IV shall be deemed to have been accepted on 1 February 2005, unless, prior to that date, not less than one third of the Parties to MARPOL 73/78 or by the 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 notified to the Organization their objections to the amendments;

3. INVITES Parties to MARPOL 73/78 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 2005 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 copies of this resolution and its annex to Members of the Organization which are not Parties to MARPOL 73/78.

ANNEX

REVISED ANNEX IV OF MARPOL 73/78

REGULATIONS FOR THE PREVENTION OF POLLUTION BY SEWAGE FROM SHIPS

Chapter 1 General

Regulation 1

Definitions

For the purposes of this Annex:

1 "New ship" means a ship:

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

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

2 "Existing ship" means a ship which is not a new ship.

3 "Sewage" means:

.1 drainage and other wastes from any form of toilets and urinals;

.2 drainage from medical premises (dispensary, sick bay, etc.) via wash basins, wash tubs and scuppers located in such premises;

.3 drainage from spaces containing living animals; or

.4 other waste waters when mixed with the drainages defined above.

4 "Holding tank" means a tank used for the collection and storage of sewage.

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

latitude 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

6 "International voyage" means a voyage from a country to which the present Convention applies to a port outside such country, or conversely.

7 "Person" means member of the crew and passengers.

8 "Anniversary date" means the day and the month of each year which will correspond to the date of expiry of the International Sewage Pollution Prevention Certificate.

Regulation 2

Application

1 The provisions of this Annex shall apply to the following ships engaged in international voyages:

.1 new ships of 400 gross tonnage and above; and

.2 new ships of less than 400 gross tonnage which are certified to carry more than 15 persons; and

.3 existing ships of 400 gross tonnage and above, five years after the date of entry into force of this Annex; and

.4 existing ships of less than 400 gross tonnage which are certified to carry more than 15 persons, five years after the date of entry into force of this Annex.

2 The Administration shall ensure that existing ships, according to subparagraphs 1.3 and 1.4 of this regulation, the keels of which are laid or which are of a similar stage of construction before 2 October 1983 shall be equipped, as far as practicable, to discharge sewage in accordance with the requirements of regulation 11 of the Annex.

Regulation 3

Exceptions

1 Regulation 11 of this Annex shall not apply to:

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

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

Chapter 2 Surveys and certification

Regulation 4

Surveys

1 Every ship which, in accordance with regulation 2, is required to comply with the provisions of this Annex 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 5 of this Annex is issued for the first time, which shall include a complete survey of its structure, equipment, systems, fittings, arrangements and material in so far as the ship is covered by this Annex. This survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with the applicable requirements of this Annex.

.2 A renewal survey at intervals specified by the Administration, but not exceeding five years, except where regulation 8.2, 8.5, 8.6 or 8.7 of this Annex is applicable. The renewal survey shall be such as to ensure that the structure, equipment, systems, fittings, arrangements and material fully comply with applicable requirements of this Annex.

.3 An additional survey either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in paragraph 4 of this regulation, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory and that the ship complies in all respects with the requirements of this Annex.

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

3 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.

4 An Administration nominating surveyors or recognizing organizations to conduct surveys as set forth in paragraph 3 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.

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 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.

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.

7 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.

8 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.

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

Regulation 5

Issue or Endorsement of Certificate

1 An international Sewage Pollution Prevention Certificate shall be issued, after an initial or renewal survey in accordance with the provisions of regulation 4 of this Annex to any ship which is engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to the Convention. In the case of existing ships this requirement shall apply five years after the date of entry into force of this Annex.

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

Regulation 6

Issue or Endorsement of a Certificate by another Government

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

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

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

Regulation 7

Form of Certificate

The International Sewage Pollution Prevention Certificate shall be drawn up in the form corresponding to the model given in the Appendix 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 8

Duration and validity of Certificate

1 An International Sewage 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 three months before the expiry date of the existing Certificate, the new Certificate shall be valid from the date of completion of the renewal survey to a date not exceeding five years from the date of expiry of the existing Certificate.

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* Refer to the Guidelines for the authorization of organizations acting on behalf of the Administrations, adopted by the Organization by resolution A.739(18), and the Specifications on the survey and certification functions of recognized organizations acting on behalf of the Administration, adopted by the Organization by resolution A.789(19).

.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 five years from the date of expiry of the existing Certificate.

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

3 If a Certificate is issued for a period of less than five years, the Administration may extend the validity of the Certificate beyond the expiry date to the maximum period specified in paragraph 1 of this regulation.

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

5 If a ship at the time when a Certificate expires is not in a port in which it is to be surveyed, the Administration may extend the period of validity of the Certificate but this extension shall be granted only for the purpose of allowing the ship to complete its voyage to the port in which it is to be surveyed and then only in cases where it appears proper and reasonable to do so. No Certificate shall be extended for a period longer than three months, and a ship to which an extension is granted shall not, on its arrival in the port in which it is to be surveyed, be entitled by virtue of such extension to leave that port without having a new Certificate. When the renewal survey is completed, the new Certificate shall be valid to a date not exceeding five years from the date of expiry of the existing Certificate before the extension was granted.

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

7 In special circumstances, as determined by the Administration, a new Certificate need not be dated from the date of expiry of the existing Certificate as required by paragraph 2.2, 5 or 6 of this regulation. In these special circumstances, the new Certificate shall be valid to a date not exceeding five years from the date of completion of the renewal survey.

8 A Certificate issued under regulation 5 or 6 of this Annex shall cease to be valid in either of the following cases:

.1 if the relevant surveys are not completed within the periods specified under regulation 4.1 of this Annex; or

.2 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 4.7 and 4.8 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 3 Equipment and control of discharge

Regulation 9

Sewage Systems

1 Every ship which, in accordance with regulation 2, is required to comply with the provisions of this Annex shall be equipped with one of the following sewage systems:

.1 a sewage treatment plant which shall be of a type approved by the Administration, taking into account the standards and test methods developed by the Organization*, or

.2 a sewage comminuting and disinfecting system approved by the Administration. Such system shall be fitted with facilities to the satisfaction of the Administration, for the temporary storage of sewage when the ship is less than 3 nautical miles from the nearest land, or

.3 a holding tank of the capacity to the satisfaction of the Administration for the retention of all sewage, having regard to the operation of the ship, the number of persons on board and other relevant factors. The holding tank shall be constructed to the satisfaction of the Administration and shall have a means to indicate visually the amount of its contents.

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* Refer to the Recommendation on international effluent standards and guidelines for performance tests for sewage treatment plants adopted by the Marine Environment Protection Committee of the Organization by resolution MEPC.2(VI). For existing ships national specifications are acceptable.

Regulation 10

Standard Discharge Connections

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

STANDARD DIMENSIONS OF FLANGES FOR DISCHARGE CONNECTIONS

Description	Dimension
Outside diameter	210 mm
Inner diameter	According to pipe outside diameter
Bolt circle diameter	170 mm
Slots in flange	4 holes 18 mm in diameter equidistantly placed on a bolt circle of the above diameter, slotted to the flange periphery. The slot width to be 18 mm
Flange thickness	16 mm
Bolts and nuts: quantity and diameter	4, each of 16 mm in diameter and of suitable length
The flange is designed to accept pipes up to a maximum internal diameter of 100 mm and shall be of steel or other equivalent material having a flat face. This flange, together with a suitable gasket, shall be suitable for a service pressure of 600 kPa.	

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

2 For ships in dedicated trades, i.e. passenger ferries, alternatively the ship's discharge pipeline may be fitted with a discharge connection which can be accepted by the Administration, such as quick connection couplings.

Regulation 11

Discharge of Sewage

1 Subject to the provisions of regulation 3 of this Annex, the discharge of sewage into the sea is prohibited, except when:

.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 shall not be discharged instantaneously but at a moderate rate when the ship is en route and proceeding at not less than 4 knots; the rate of discharge shall be approved by the Administration based upon standards developed by the Organization; or

.2 the ship has in operation an approved sewage treatment plant which has been certified by the Administration to meet the operational requirements referred to in regulation 9.1.1 of this Annex, and

.1 the test results of the plant are laid down in the ship's International Sewage Pollution Prevention Certificate; and

.2 additionally, the effluent shall not produce visible floating solids nor cause discoloration of the surrounding water.

2 The provisions of paragraph 1 shall not apply to ships operating in the waters under the jurisdiction of a State and visiting ships from other States while they are in these waters and are discharging sewage in accordance with such less stringent requirements as may be imposed by such State.

3 When the sewage is mixed with wastes or waste water covered by other Annexes of MARPOL 73/78, the requirements of those Annexes shall be complied with in addition to the requirements of this Annex.

Chapter 4 Reception facilities

Regulation 12

Reception facilities

1 The Government of each Party to the Convention, which requires ships operating in waters under its jurisdiction and visiting ships while in its waters to comply with the requirements of regulation 11.1, undertakes to ensure the provision of facilities at ports and terminals of the reception of sewage, without causing delay to ships, adequate to meet the needs of the ships using them.

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

Appendix

FORM OF CERTIFICATE

International Sewage Pollution Prevention Certificate

Issued under the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto , and as amended by resolution MEPC.115(51), (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[1]

Name of ship .....

Distinctive number or letters .....

Port of registry .....

Gross tonnage .....

Number of persons which the ship is certified to carry .....

IMO Number[2].....

New/existing ship*

Date on which keel was laid or ship was at a similar stage of construction or, where applicable, date on which work for a conversion or an alteration or modification of a major character was commenced .....

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1 Alternatively, the particulars of the ship may be placed horizontally in boxes.

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

* Delete as appropriate.

THIS IS TO CERTIFY

1 That the ship is equipped with a sewage treatment plant/comminuter/holding tank* and a discharge pipeline in compliance with regulations 9 and 10 of Annex IV of the Convention as follows:

*1.1 Description of the sewage treatment plant:
Type of sewage treatment plant .....
Name of manufacturer .....
The sewage treatment plant is certified by the Administration to meet the effluent standards as provided for in resolution MEPC.2(VI)

*1.2 Description of comminuter:
Type of comminuter .....
Name of manufacturer .....
Standard of sewage after disinfection .....

*1.3 Description of holding tank:
Total capacity of the holding tank .....m^3
Location .....

1.4 A pipeline for the discharge of sewage to a reception facility, fitted with a standard shore connection

2 That the ship has been surveyed in accordance with regulation 4 of Annex IV of the Convention.

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

This Certificate is valid until .....[3]
subject to surveys in accordance with regulation 4 of Annex IV of the Convention.

Completion date of 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)

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[3] Insert the date of expiry as specified by the Administration in accordance with regulation 8.1 of Annex IV of the Convention. The day and the month of this date correspond to the anniversary date as defined in regulation 1.8 of Annex IV of the Convention.

* Delete as appropriate.

Endorsement to extend the Certificate if valid for less than 5 years where regulation 8.3. applies

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.3 of Annex IV of the Convention, be accepted as valid until .....

Signed: .....
(signature of authorized official)

Place: .....

Date: .....

(Seal or stamp of the authority, as appropriate)

Endorsement where the renewal survey has been completed and regulation 8.4 applies

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with regulation 8.4 of Annex IV of the Convention, be accepted as valid until .....

Signed: .....
(signature of authorized official)

Place: .....

Date: .....

(Seal or stamp of the authority, as appropriate)

Endorsement to extend the validity of the Certificate until reaching the port of survey or for a period of grace where regulation 8.5 or 8.6 applies

This certificate shall, in accordance with regulation 8.5 or 8.6* of Annex IV of the Convention, be accepted as valid until .....

Signed: .....
(signature of authorized official)

Place: .....

Date: .....

(Seal or stamp of the authority, as appropriate)

---

* Delete as appropriate.

RESOLUTION MEPC.116(51)

Adopted on 1 April 2004

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

(Amendments to the Appendix to Annex V 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 proposed amendments to the Appendix to Annex V of MARPOL 73/78,

1. ADOPTS, in accordance with article 16(2)(d) of the 1973 Convention, the amendments to the Appendix 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 February 2005, unless, prior to that date, not less than one third of the Parties to MARPOL 73/78 or by the 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 notified to the Organization their objections to the amendments;

3. INVITES Parties to MARPOL 73/78 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 2005 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 copies of this resolution and its annex to Members of the Organization which are not Parties to MARPOL 73/78.

ANNEX

AMENDMENTS TO THE APPENDIX TO ANNEX V OF MARPOL 73/78

1 Garbage category "4" in Section 3 of the Form of Garbage Record Book is amended as follows:

"4 Cargo residues, paper products, rags, glass, metal, bottles, crockery, etc."

2 Paragraph 4.1(a)(ii) of Section 4 in the Form of Garbage Record Book is amended as follows:

"(ii) Position of the ship (latitude and longitude). Note for cargo residue discharges, include discharge start and stop positions."

3 The **NOTE** included in the Record of Garbage Discharges is amended by adding the following sentence:

"DISCHARGES OF CARGO RESIDUES REQUIRE START AND STOP POSITIONS TO BE RECORDED."

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 co-ordinates:

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.

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;

.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.

.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.

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:

$$f \; x \; h_c \; x \; \rho_c x \; g \; + p \leq d_n \; x \; \rho_s \; x \; g$$

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:

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

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.

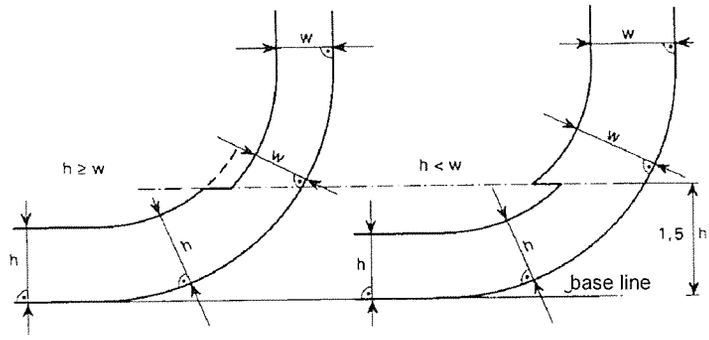


Figure 1 - ***Cargo tank boundary lines for the purpose of paragraph 3***

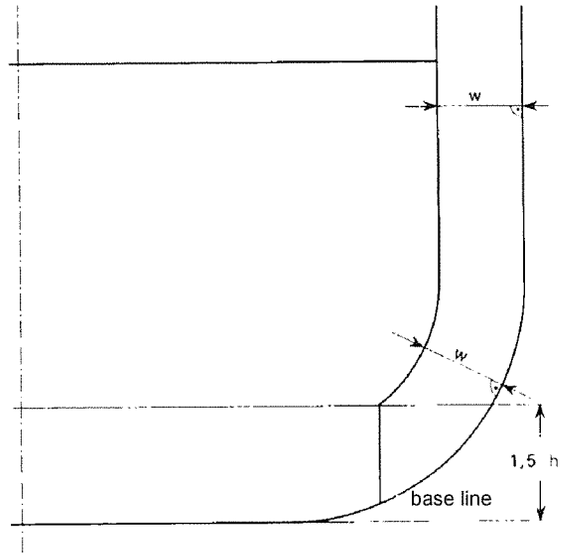


Figure 2 - *Cargo tank boundary lines for the purpose of paragraph 4*

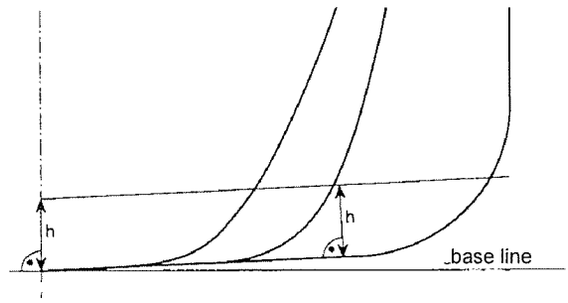


Figure 3 - *Cargo tank boundary lines for the purpose of paragraph 6*

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 340°C when tested by the method acceptable to the Organization.

.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.

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.

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 15°C higher than 900 kg/m^3;

.2 fuel oils having either 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.

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 15°C 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:

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

.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;

$P_{SV} = 1 - P_{Su} - P_{Sl}$ = 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;

.3 Table of probabilities for side damage

X_a/L	P_{Sa}
0.00	0.000
0.05	0.023
0.10	0.068
0.15	0.117
0.20	0.167
0.25	0.217
0.30	0.267
0.35	0.317
0.40	0.367
0.45	0.417
0.50	0.467
0.55	0.517
0.60	0.567
0.65	0.617
0.70	0.667
0.75	0.717
0.80	0.767
0.85	0.817
0.90	0.867
0.95	0.917
1.00	0.967

X_f/L	P_{Sf}
0.00	0.967
0.05	0.917
0.10	0.867
0.15	0.817
0.20	0.767
0.25	0.717
0.30	0.667
0.35	0.617
0.40	0.567
0.45	0.517
0.50	0.467
0.55	0.417
0.60	0.367
0.65	0.317
0.70	0.267
0.75	0.217
0.80	0.167
0.85	0.117
0.90	0.068
0.95	0.023
1.00	0.000

Z_l/D_S	P_{Sl}
0.00	0.000
0.05	0.000
0.10	0.001
0.15	0.003
0.20	0.007
0.25	0.013
0.30	0.021
0.35	0.034
0.40	0.055
0.45	0.085
0.50	0.123
0.55	0.172
0.60	0.226
0.65	0.285
0.70	0.347
0.75	0.413
0.80	0.482
0.85	0.553
0.90	0.626
0.95	0.700
1.00	0.775

Z_u/D_S	P_{Su}
0.00	0.968
0.05	0.952
0.10	0.931
0.15	0.905
0.20	0.873
0.25	0.836
0.30	0.789
0.35	0.733
0.40	0.670
0.45	0.599
0.50	0.525
0.55	0.452
0.60	0.383
0.65	0.317
0.70	0.255
0.75	0.197
0.80	0.143
0.85	0.092
0.90	0.046
0.95	0.013
1.00	0.000

P_{Sy} shall be calculated as follows:

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

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

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

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}
0.00	0.000
0.05	0.002
0.10	0.008
0.15	0.017
0.20	0.029
0.25	0.042
0.30	0.058
0.35	0.076
0.40	0.096
0.45	0.119
0.50	0.143
0.55	0.171
0.60	0.203
0.65	0.242
0.70	0.289
0.75	0.344
0.80	0.409
0.85	0.482
0.90	0.565
0.95	0.658
1.00	0.761

X_f/L	P_{Bf}
0.00	0.969
0.05	0.953
0.10	0.936
0.15	0.916
0.20	0.894
0.25	0.870
0.30	0.842
0.35	0.810
0.40	0.775
0.45	0.734
0.50	0.687
0.55	0.630
0.60	0.563
0.65	0.489
0.70	0.413
0.75	0.333
0.80	0.252
0.85	0.170
0.90	0.089
0.95	0.026
1.00	0.000

Y_p/B_B	P_{Bp}
0.00	0.844
0.05	0.794
0.10	0.744
0.15	0.694
0.20	0.644
0.25	0.594
0.30	0.544
0.35	0.494
0.40	0.444
0.45	0.394
0.50	0.344
0.55	0.297
0.60	0.253
0.65	0.211
0.70	0.171
0.75	0.133
0.80	0.097
0.85	0.063
0.90	0.032
0.95	0.009
1.00	0.000

Y_s/B_B	P_{Bs}
0.00	0.000
0.05	0.009
0.10	0.032
0.15	0.063
0.20	0.097
0.25	0.133
0.30	0.171
0.35	0.211
0.40	0.253
0.45	0.297
0.50	0.344
0.55	0.394
0.60	0.444
0.65	0.494
0.70	0.544
0.75	0.594
0.80	0.644
0.85	0.694
0.90	0.744
0.95	0.794
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.

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:

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

.2 For bottom damages:

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

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 the case where bottom damage simultaneously involves four centre tanks, the value of O_s may be calculated according to the formula:

$$O_s = 1/4 \, (\Sigma \, Z_i W_i + \Sigma \, Z_i C_i) \qquad \text{(III)}$$

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

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

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

.4 the initial metacentric height GMo, corrected for free surface measured at 0° 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.

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 30° 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 20° beyond the position of equilibrium in association with a maximum residual righting lever of at least 0.1 metre within the 20° 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 5° for each individual compartment. The Administration may require or allow the free surface corrections to be calculated at an angle of heel greater than 5° 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;

.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 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.

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 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.

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

.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 computerized, 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.

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.

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.

APPENDIX I

LIST OF OILS*

Asphalt solutions
Blending stocks
Roofers flux
Straight run residue

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

Distillates
Straight run
Flashed feed stocks

Gas oil
Cracked

Gasoline blending stocks
Alkylates – fuel
Reformates
Polymer – fuel

Gasolines
Casinghead (natural)
Automotive
Aviation
Straight run
Fuel oil no. 1 (kerosene)
Fuel oil no. 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

Naphtha
Solvent
Petroleum
Heartcut distillate oil

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* 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‡ .....

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* The IOPP Certificate 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.

** 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 duly authorized official issuing the certificate)*

(Seal or stamp of the authority, as appropriate)

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* 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 (dd/mm/yyyy): .....

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

Annual*/Intermediate survey*:

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

Place: .....

Date (dd/mm/yyyy): .....

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

Annual*/Intermediate survey*:

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

Place: .....

Date (dd/mm/yyyy): .....

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

Annual survey:

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

Place: .....

Date (dd/mm/yyyy): .....

(Seal or stamp of the authority, as appropriate)

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* 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 (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 I of the Convention, be accepted as valid until (dd/mm/yyyy): .....

Signed: .....
(Signature of duly 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 I of the Convention, be accepted as valid until (dd/mm/yyyy): .....

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

Place: .....

Date (dd/mm/yyyy): .....

(Seal or stamp of the authority, as appropriate)

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* 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 (dd/mm/yyyy): .....

Signed: .....
(Signature of duly 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 I of the Convention the new anniversary date is (dd/mm/yyyy): .....

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

Place: .....

Date (dd/mm/yyyy): .....

(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 (dd/mm/yyyy): .....

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

Place: .....

Date (dd/mm/yyyy): .....

(Seal or stamp of the authority, as appropriate)

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* 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 The language of the original Record 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.

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); ☐

.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	

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

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 ☐

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)

....

(Date of issue) *(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 The language of the original Record 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.

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); ☐

.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	

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

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 ☐

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 ☐

.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 ☐

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 ☐

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

7.3 The overboard discharge outlets, other than the discharge manifold, for dirty ballast water or oil-contaminated water from cargo tank areas are located:

7.3.1 Above the waterline ☐

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)

....
(Date of issue) *(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.[1]

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];

.3 transfer to slop tank or holding tank (indicate tank(s); state the total quantity retained in tank(s), in m^3).

---

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.

(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[2].

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)).

---

[2] 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: .....

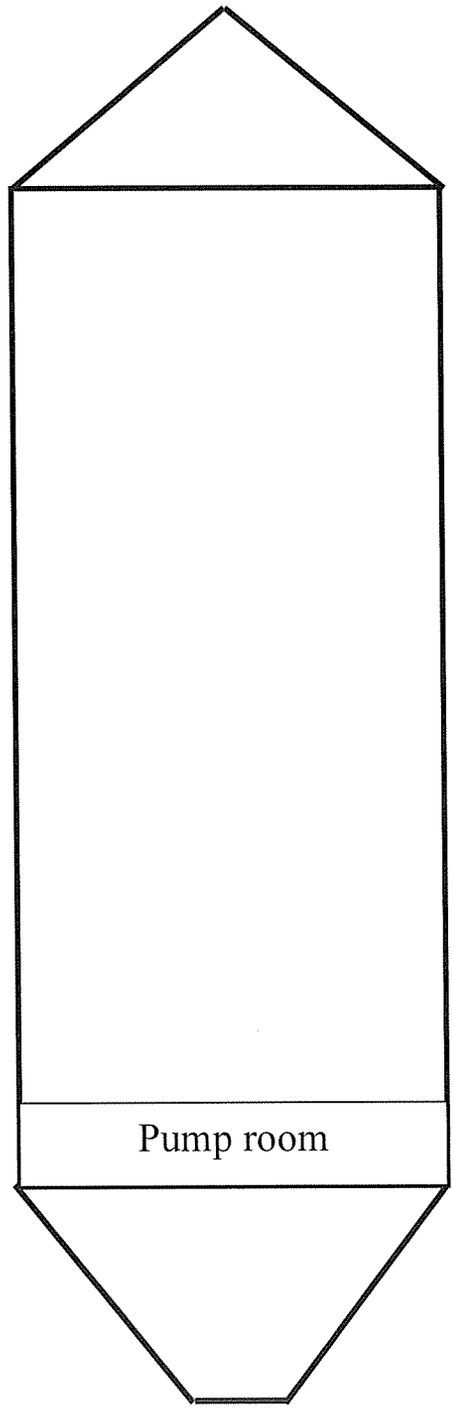
Period from: ..... to: .....

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°C 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.

15. Time washing was completed or stopped.

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[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.

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.

30. Method of cleaning.[4]

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

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

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.

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.

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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.

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.

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?

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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.

(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.

75. Approximate quantity, in m^3, and type of oil.

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

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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.

(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 .....

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 regulation 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.

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.

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.

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".

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**

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.....

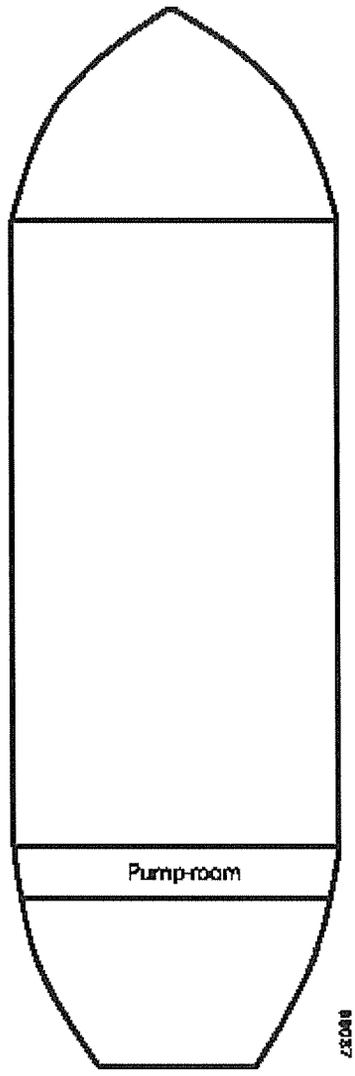
Gross tonnage.....

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?

.2 Were tank washing(s) discharged from a slops collecting tank? If so, state quantity and rate of discharge.

---

* 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.

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?

34 An exemption has been granted from mandatory prewash.

35 Reasons for exemption.

---

* 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.

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.....

---

* The NLS Certificate shall be at least in English, French or Spanish. Where entries in an official national language of the State whose flag is entitled to fly are also used, this shall prevail in case of a dispute or discrepancy.

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

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 duly 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 duly authorized official)
Place.....
Date (dd/mm/yyyy): .....

(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate survey*:

Signed.....
(Signature of duly authorized official)
Place.....
Date (dd/mm/yyyy): .....

(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate survey*:

Signed.....
(Signature of duly authorized official)
Place.....
Date (dd/mm/yyyy): .....

(Seal or stamp of the authority, as appropriate)

Annual survey:

Signed.....
(Signature of duly authorized official)
Place.....
Date (dd/mm/yyyy): .....

(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 II of the Convention, the ship was found to comply with the relevant provisions of the Convention:

Signed.....
(Signature of duly 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 (dd/mm/yyyy): .....

Signed.....
(Signature of duly 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 (dd/mm/yyyy): .....

Signed.....
(Signature of duly authorized official)
Place.....
Date (dd/mm/yyyy): .....

(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 II of the Convention, be accepted as valid until (dd/mm/yyyy): .....

Signed.....
(Signature of duly 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 (dd/mm/yyyy): .....

Signed.....
(Signature of duly 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 (dd/mm/yyyy): .....

Signed.....
(Signature of duly authorized official)
Place.....
Date (dd/mm/yyyy): .....

(Seal or stamp of the authority, as appropriate)

---

* Delete 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

1 Main features of MARPOL 73/78, Annex II

2 Description of the ship's equipment and arrangements

3 Cargo unloading procedures and tank stripping

4 Procedures relating to the cleaning of cargo tanks, the discharge of residues, ballasting and deballasting

5 Information and Procedures

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.

Table 2 - Cargo tank information

Tank no.	Capacity (m^3)	Stripping quantity (litres)

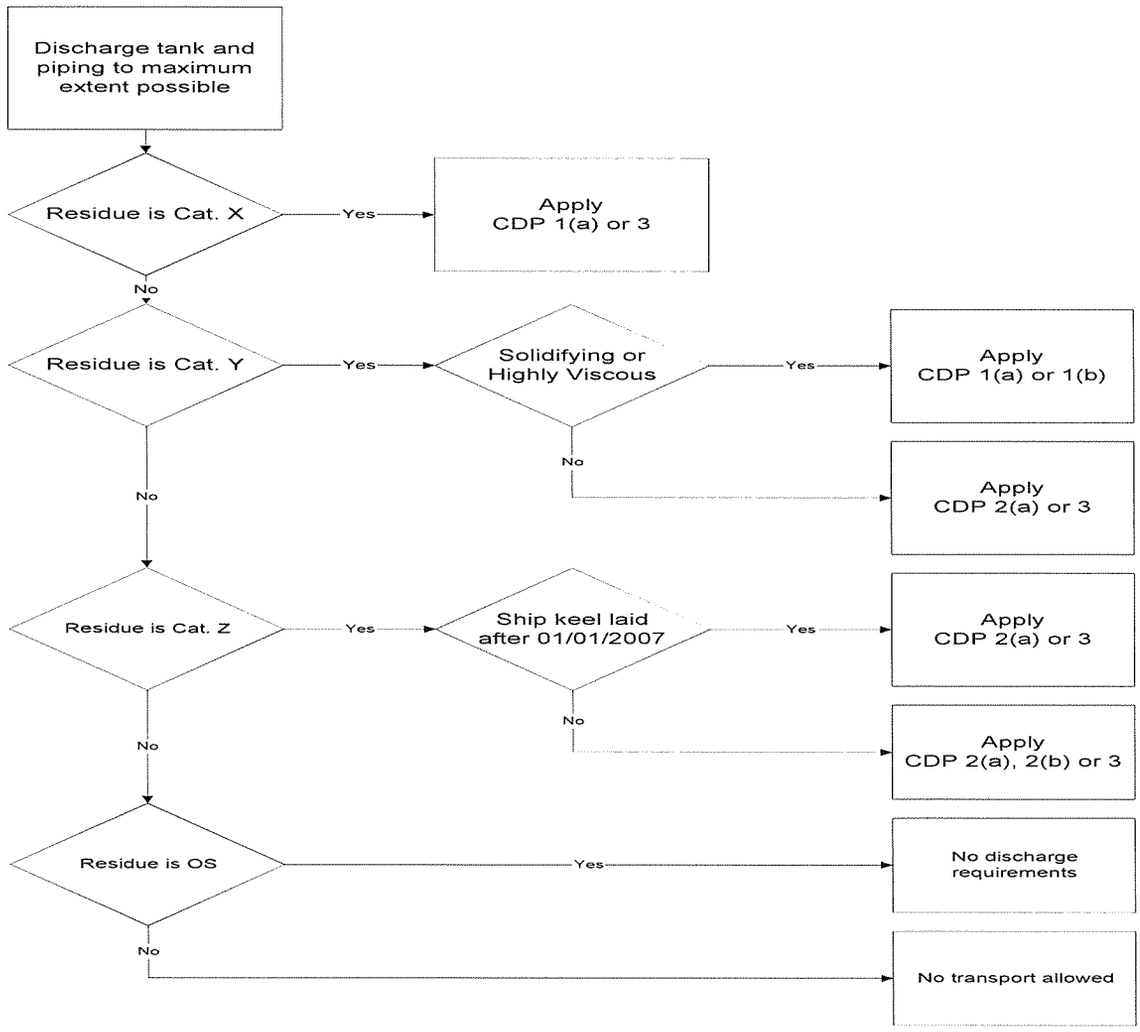
ADDENDUM A

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."

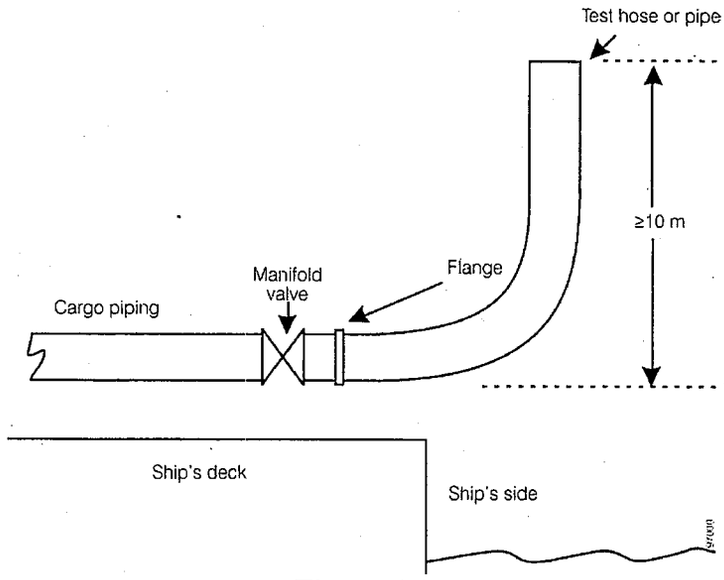


Figure 5-1

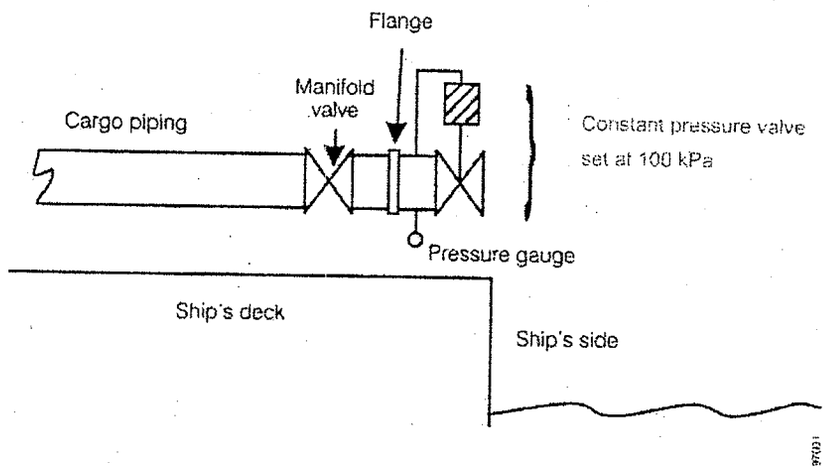


Figure 5-2

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.

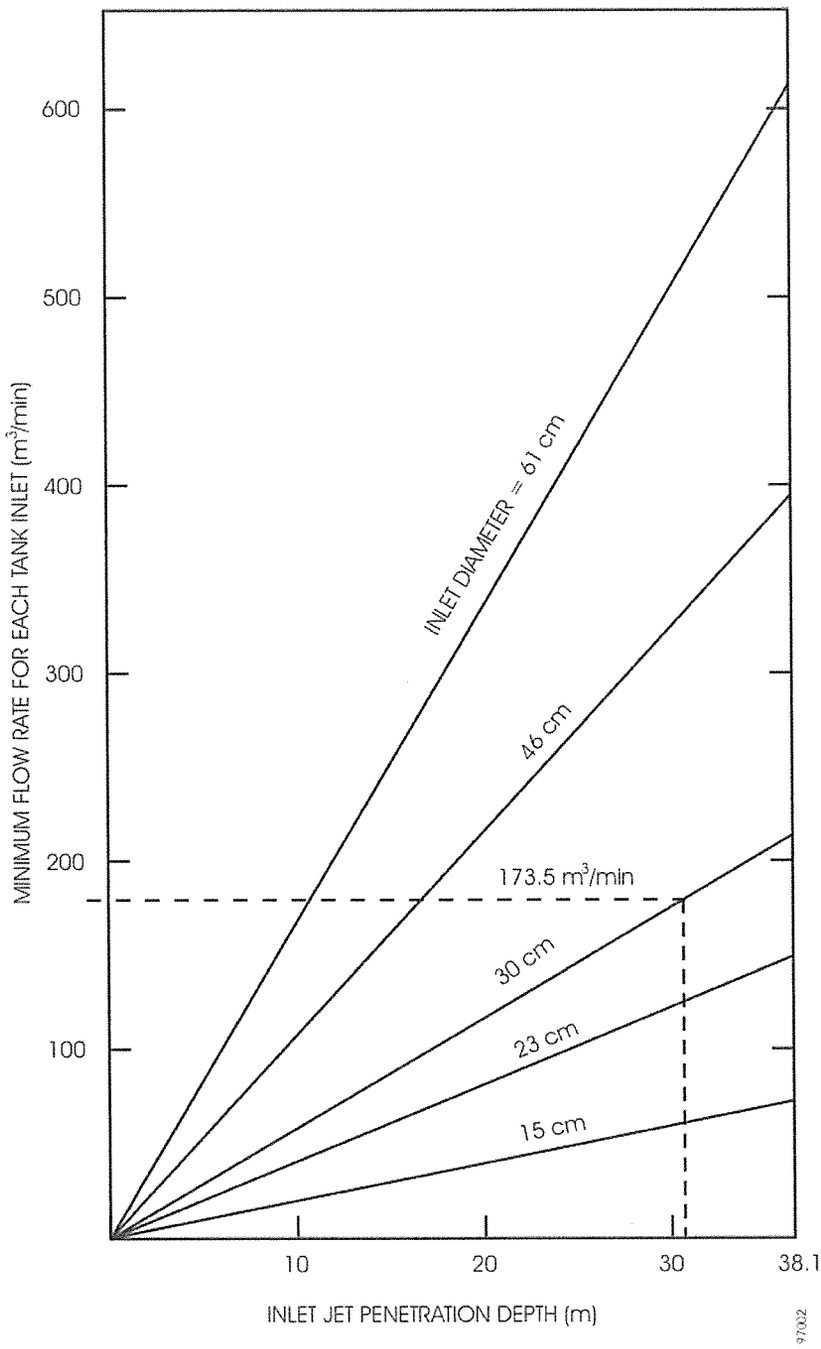


Figure 7-1. Minimum flow rate as a function of jet penetration depth. Jet penetration depth shall be compared against tank height.

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.

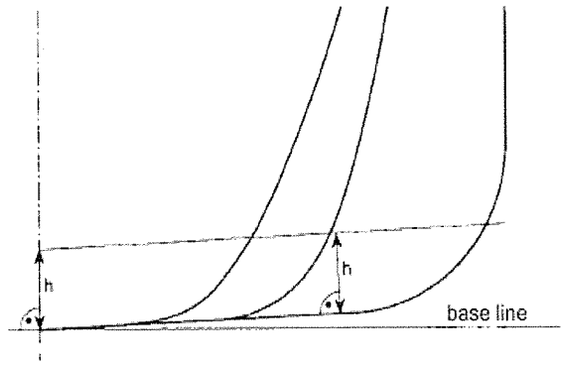


Figure 1 – Oil fuel tank boundary lines for the purpose of paragraph 6

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

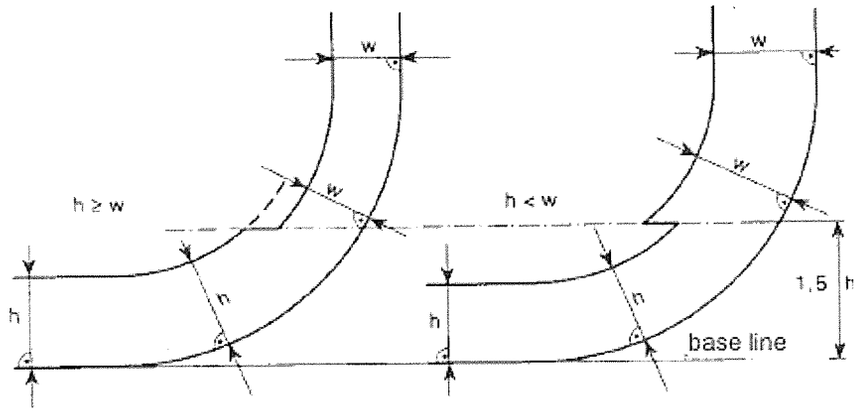


Figure 2 – Oil fuel tank boundary lines for the purpose of paragraphs 7 and 8

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:

$O_M < 0.0157\text{-}1.14E\text{-}6 \cdot C$ for $600\ m^3 \leq C < 5{,}000\ m^3$

$O_M < 0.010$ for $C \geq 5{,}000\ m^3$

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

where:

i = 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 $$O_{MB(2.5)} = \sum_{1}^{n} P_{B(i)}\ O_{B(i)}\ C_{DB(i)} \quad (m^3)$$

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.

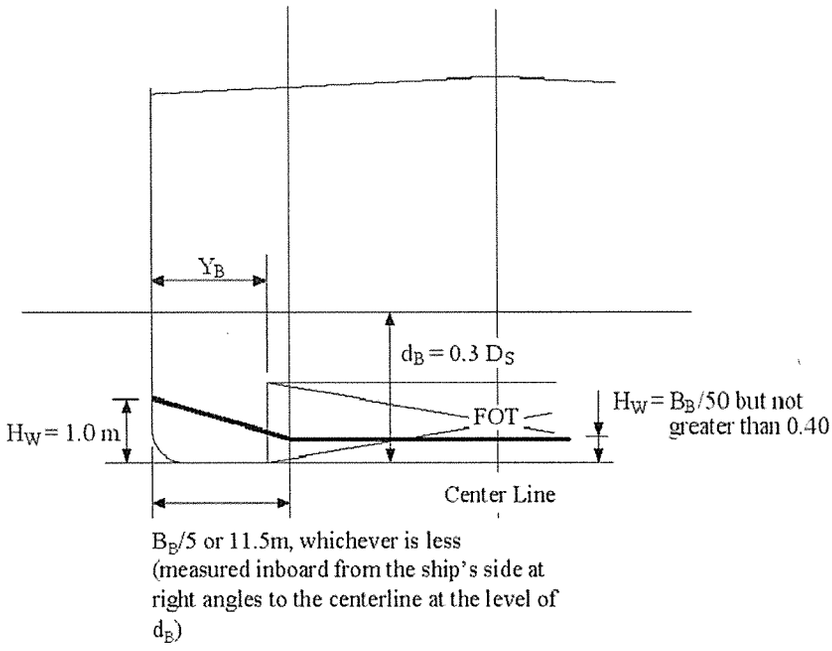


Figure 3 – Dimensions for calculation of the minimum oil outflow for the purpose of subparagraph 11.5.3.3

.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

[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).

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 $P_B = P_{BL} \cdot P_{BT} \cdot P_{BV}$

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 15°C higher than 900 kg/m^3 or a kinematic viscosity at 50°C higher than 180 mm^2/s; or"

RESOLUTION MEPC.143(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

(Addition of regulation 13 to Annex IV 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 proposed new regulation 13 of Annex IV of MARPOL 73/78 concerning port State control on operational requirements,

1. ADOPTS, in accordance with article 16(2)(b), (c) and (d) of the 1973 Convention, the new regulation 13 of Annex IV 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 revised Annex IV shall be deemed to have been accepted on 1 February 2007, unless, prior to that date, not less than one third of the Parties to MARPOL 73/78 or by the 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 notified to the Organization their objections to the amendments;

3. INVITES Parties to MARPOL 73/78 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 copies of this resolution and its Annex to Members of the Organization which are not Parties to MARPOL 73/78.

ANNEX

AMENDMENTS TO THE REVISED MARPOL ANNEX IV

The following new chapter 5 and regulation 13 are added after the existing regulation 12:

Chapter 5 – Port State Control

"Regulation 13 – 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 sewage.

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."

RESOLUTION MEPC.154(55)
Adopted on 13 October 2006

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

(Designation of the Southern South African waters as a Special 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") 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 1 of the revised Annex I to MARPOL 73/78, with a view to designating the Southern South African waters as a Special Area,

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 September 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 March 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 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 ANNEX I OF MARPOL 73/78

(Designation of the Southern South African waters as a Special Area)

A new subparagraph .10 is added to regulation 1.11 as follows:

".10 *the Southern South African waters* means the sea area enclosed by the following co-ordinates:

31° 14′ S; 017° 50′ E
31° 30′ S; 017° 12′ E
32° 00′ S; 017° 06′ E
32° 32′ S; 016° 52′ E
34° 06′ S; 017° 24′ E
36° 58′ S; 020° 54′ E
36° 00′ S; 022° 30′ E
35° 14′ S; 022° 54′ E
34° 30′ S; 026° 00′ E
33° 48′ S; 027° 25′ E
33° 27′ S; 027°12′ E"

RESOLUTION MEPC.156(55)
Adopted on 13 October 2006

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

(Revised Annex III 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),

RECALLING further that, at its fifty-fourth session, it had endorsed the proposal by the DSC Sub-Committee regarding the timeframe leading to the entry into force of the revised MARPOL Annex III to make it coincide with the entry into force of amendment 34-08 to the International Maritime Dangerous Goods (IMDG) Code,

HAVING CONSIDERED the proposed amendments to Annex III of MARPOL 73/78 (revised Annex III),

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 2009, 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 2010 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 ANNEX III OF MARPOL 73/78

(Revised Annex III)

The existing text of MARPOL Annex III 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.

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 with the correct technical name (trade names alone shall not be used) and, further, shall be durably marked or labelled to indicate that the substance is a marine pollutant. Such identification shall be supplemented where possible by any other means, for example, by use of the relevant United Nations number.

2 The method of marking the correct technical name and of affixing labels on packages containing a harmful substance shall be such that this information will still be identifiable on packages surviving at least three months' immersion in the sea. In considering suitable marking and labelling, account shall be taken of the durability of the materials used and of the surface of the package.

3 Packages containing small quantities of harmful substances may be exempted from the marking requirements.

Regulation 4
Documentation

1 In all documents relating to the carriage of harmful substances by sea where such substances are named, the correct technical name of each such substance shall be used (trade names alone shall not be used) and the substance further identified by the addition of the words "MARINE POLLUTANT".

2 The shipping documents supplied by the shipper shall include, or be accompanied by, a signed certificate or declaration that the shipment offered for carriage is properly packaged and marked, labelled or placarded as appropriate and in proper condition for carriage to minimize the hazard to the marine environment.

3 Each ship carrying harmful substances shall have a special list or manifest setting forth the harmful substances on board and the location thereof. A detailed stowage plan which sets out the location of the harmful substances on board may be used in place of such special list or manifest. Copies of such documents shall also be retained on shore by the owner of the ship or his representative until the harmful substances are unloaded. A copy of one of these documents shall be made available before departure to the person or organization designated by the port State authority.

4 At any stopover, where any loading or unloading operations, even partial, are carried out, a revision of the documents listing the harmful substances taken on board, indicating their location on board or showing a detailed stowage plan, shall be made available before departure to the person or organization designated by the port State authority.

5 When the ship carries a special list or manifest or a detailed stowage plan, required for the carriage of dangerous goods by the International Convention for the Safety of Life at Sea, 1974, as amended, the documents required by this regulation may be combined with those for dangerous goods. Where documents are combined, a clear distinction shall be made between dangerous goods and harmful substances covered by this Annex.

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.

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, 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.

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.

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:

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

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 log $K_{ow} \geq 4$ (unless the experimentally determined BCF < 500).

Category: Chronic 2

96 hr LC_{50} (for fish)	>1 to ≤ 10 mg/l and/or
48 hr EC_{50} (for crustacea)	>1 to ≤ 10 mg/l and/or
72 or 96 hr ErC_{50} (for algae or other aquatic plants)	>1 to ≤ 10 mg/l

and the substance is not rapidly degradable and/or the log $K_{ow} \geq 4$ (unless the experimentally determined BCF <500), unless the chronic toxicity NOECs are > 1 mg/l.

"

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; or"

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.

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.

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. 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.

5 Records 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.

2 The notification specified in paragraph 1 of this regulation 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."

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	

"

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 $\geq$ 5,000)	☐
.3	The ship complies with regulation 21.1.2	☐
.4	The ship complies with regulation 21.4.2 (600 $\leq$ 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 (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).)

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 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.
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.
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.

(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."

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."