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FIRST SCHEDULE

(Section 9 (3))

LIST OF SUBSTANCES ESTABLISHED BY THE MARINE ENVIRONMENT PROTECTION COMMITTEE OF THE ORGANIZATION IN ACCORDANCE WITH PARAGRAPH 2(a) OF ARTICLE 1 OF THE PROTOCOL OF 1973 TO THE INTERVENTION CONVENTION

Oils carried in bulk as listed in Appendix I to Annex I of MARPOL 73/78 other than those covered by the 1969 I Intervention Convention

Asphalt Solutions

Blending stocks
Roofers flux
Straight Run residue

Oils

Clarified
Mixtures containing Crude Oil
Road Oil
Transformer Oil
Aromatic Oil (excluding vegetable oil)
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
Reformats
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

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Naphtha

Solvent

Petroleum

Heartcut distillate oil

2. Noxious liquid substances carried in bulk

Acetone cyanohydrin

Acrylonitrile

Alachlor technical (90% or more)

Alcohol (C₁₂ – C₁₅) poly(1-6)ethoxylates

Alcohol (C₁₂ – C₁₅) poly(7-19)ethoxylates

Alcohol (C₆ – C₁₇) (secondary) poly(3-6)ethoxylates

Alcohol (C₆ – C₁₇) (secondary) poly(7-12)ethoxylates

Alkaryl polyethers (C₉-C₂₀)

Alkyl acrylate-vinylpyridine copolymer in toluene

Alkylbenzene, alkylindane, alkylindene mixture (each C₁₂-C₁₇)

Alkyl (C₃-C₄) benzenes

Alkyl (C₅-C₈) benzenes

Alkyl (C₇-C₉) nitrates

Allyl alcohol

Allyl chloride

Ammonium sulphide solution (45% or less)

Aniline

Benzene and mixtures having 10% benzene or more

Benzyl alcohol

Benzyl chloride

Butene oligomer

Butyl acrylate (all isomers)

Butylamine (all isomers)

Butyl benzyl phthalate

Butyl butyrate (all isomers)

Butyraldehyde (all isomers)

Calcium alkyl (C₉) phenol sulphide/polyolefin phosphorusulphide mixture

Calcium hypochlorite solution (more than 15%)

Calcium long-chain alkyl phenate sulphide (C₈-C₄₀)

Camphor oil

Carbolic oil

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Carbon disulphide
Carbon tetrachloride
Chlorinated paraffins (C₁₀-C₁₃)
Chloroacetic acid (80% or less)
Chlorobenzene
Chloroform
Chlorohydrins (crude)
o-Chloronitrobenzene
2- or 3 - Chloronitrobenzene
m-Chlorotoluene
o- Chlorotoluene
p- Chlorotoluene
Chlorotoluenes (mixed isomers)
Coal tar
Coal tar naphtha solvent
Coal tar pitch (molten)
 Cobalt naphthenate in solvent naphtha
 Cresols (all isomers)
 Creosote (coal tar)
 Creosote (wood)
 Cresylic acid, dephenolized
 Cresylic acid, sodium salt solution
 Crotonaldehyde
 1,5,9 - Cyclododecatriene
 Cyclohexyl acetate
 Cyclohexylamine
 1,3 - Cyclopentadiene dimer (molten)
 Cyclopentene
 Decanoic acid
 Decene
 Decyl acetate

Decyl acrylate
 Decyl alcohol (all isomers)
 Decyloxytetrahydrothiophene dioxide
 Dibutylamine
 Dibutyl hydrogen phosphonate
 Dibutyl phthalate

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Dichlorobenzenes (all isomers)
Dichloroethyl ether
1,6-Dichlorohexane
2,4 – Dichlorophenol
2,4 – Dichlorophenoxyacetic acid, diethanolamine salt solution
2,4 – Dichlorophenoxyacetic acid, dimethylamine salt solution
(70% or less)
2,4 – Dichlorophenoxyacetic acid, triisopropanolamine salt solution
1,2 – Dichloropropane
1,3 – Dichloropropene
Dichloropropene/dichloropropane mixtures
Diethylamine
Diethylaminoethanol
Diethylbenzene
Diethyl sulphate
Diglycidyl ether of bisphenol A
Diglycidyl ether of bisphenol F
Di-n-hexyl adipate
Diisobutylamine
Diisobutylene
Diisobutyl phthalate
Diisopropylamine
Diisopropylbenzene (all isomers)
Dimethyl adipate
Dimethyl amine (40% aqueous)
Dimethylamine solution (45% or less)
Dimethylamine solution (greater than 45% but not greater than
55%)
Dimethylamine solution (greater than 55% but not greater than
65%)
N,N-Dimethylcyclohexylamine
Dimethyl hydrogen phosphite
Dimethyloctanoic acid
Dinitrotoluene (molten)
1,4-Dioxane
Dinitrophenols
Diphenyl
Diphenylamine, reaction product with 2,2,4 – trimethylpentene

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Diphenylamines, alkylated
Diphenyl/diphenyl ether mixtures
Diphenyl ether
Diphenyl ether/diphenyl phenyl ether mixture
Diphenylmethane diisocyanate
Diphenylol propane
Diphenylol propane – epichlorohydrin resins
Di-n-propylamine
Dodecene (all isomers)
Dedecyl alcohol
Dodecylamine/tetradecylamine mixture
Dodecyldimethylamine/tetradecyldimethylamine mixture
Dodecyl diphenyl ether disulphonate solution
Dodecylphenol
Drilling brines (containing zinc salts)
Epichlorohydrin
Ethyl acrylate
Ethylamine
Ethylamine solutions (72% or less)
Ethylbenzene
N-Ethylbutylamine
Ethylene chlorohydrin
Ethylenediamine
Ethylene dibromide
Ethylene dichloride
Ethylene glycol methyl ether acetate
Ethylene oxide/propylene oxide mixtures with an ethylene oxide
content of not more than 30%
in weight
2-Ethylhexyl acrylate
2-Ethylhexylamine
Ethylidenenorbornene
o-Ethylphenol
2-Ethyl-3-propylacrolein
Ethyltoluene
Ethyl parathion
Fentin acetate (dry)
Fluorosilicic acid (20-30%) in water solution

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Formaldehyde solutions (45% or less)
Fumaric adduct of rosin, water dispersion
Furfural
Glycidyl ester of C₁₀ trialkylacetic acid
Heptyl acetate
Hexamethylenediamine solution
Hexyl acetate
2-Hydroxyethyl acrylate
2-Hydroxy-4-(methylthio) butanoic acid
Isophoronediamine
Isophorone diisocyanate
Lactonitrile solution (80% or less)
Lauric acid
Liquid chemical wastes
Long-chain alkaryl polyether (C₁₁-C₂₀)
Long-chain polyetheramine in alkyl (C₂-C₄) benzenes
Long-chain polyetheramine in aromatic solvent
Magnesium long-chain alkyl salicylate (C11+)
Mercaptobenzothiazol, sodium salt solution
Mercuric compounds
Metam sodium solution
Methacrylic resin in ethylene dichloride
Methyl acrylate
Methyl butyl ketone
Methylene chloride
Methylcyclopentadiene dimer
2-Methyl-6-ethylaniline
Methyl heptyl ketone
Methyl methacrylate
Methylnaphthalene (molten)
3-Methylpyridine
Methyl salicylate
alpha-Methylstyrene
Motor fuel anti-knock compounds (containing lead alkyls)
Naphthalene (molten)
Naphthenic acids
Neodecanoic acid
Nitrating acid (mixture of sulphuric and nitric acids)

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Nitrobenzene
o-Nitrophenol (molten)
o-or p – Nitrotoluenes
Nonene (all isomers)
Nonylphenol
Nonylphenol poly (4-12) ethoxylates
Noxious liquid, N.F., (1) n.o.s. (trade name..., contains...)S.T. 1, Cat.A*
Noxious liquid, F., (2) n.o.s. (trade name..., contains...) S.T. 1, Cat. A*
Noxious liquid, N.F., (3) n.o.s. (trade name..., contains...) S.T.2, Cat. A*
Noxious liquid, F., (4) n.o.s. (trade name..., contains...) S.T.2, Cat. B*
Noxious liquid, N.F., (5) n.o.s. (trade name..., contains...) S.T. 2, Cat. B*
Noxious liquid, N.F., (6) n.o.s. (trade name..., contains ...) S.T. 2, Cat. B, m.p.
15°C+*
Noxious liquid, F., (7) n.o.s. (trade name..., contains ...) S.T. 2, Cat. B*
Noxious liquid, F., (8) n.o.s. (trade name... contains ...) S.T. 2, Cat. B, M.P.
15°C+*
Noxious liquid, N.F., (9) n.o.s. (trade name... contains...) S.T. 3, Cat. A*
Noxious liquid, F., (10) n.o.s. (trade name..., contains...) S.T. 3, Cat. A*
Noxious liquid, N.F., (11) n.o.s. (trade name..., contains...) S.T. 3, Cat. B*
Noxious liquid, N.F., (12) n.o.s. (trade name..., contains ...) S.T. 3, Cat. B,
M.P. 15°C+*
Noxious liquid, F., (13) n.o.s. (trade name..., contains...) S.T. 3, Cat. B*
Noxious liquid, F., (14) n.o.s. (trade name ...,contains...) S.T.3, Cat. B, m.p.
15°C+*
Octene (all isomers)
Octyl aldehydes
Olefin mixtures (C₅-C₁₅)
alpha-Olefins (C₆-C₁₈) mixtures
Oleum
Oleylamine
Palm kernel acid oil
Pentachloroethane
Perchloroethylene
Phosphorus, yellow or white
Phthalic anhydride (molten)
alpha-Pinene
beta-Pinene
Poly(2+) cyclic aromatics

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Polyethylene polyamines
Polyolefin amide alkeneamine (C₂₈ +)
Polyolefin amide alkeneamine borate (C₂₈-C₂₅₀)
Polyolefin amide alkeneamine polyol
Polyolefinamine in alkyl (C₂-C₄) benzenes
Polyolefinamine in aromatic solvent
Polyolefin ester (C₂₈-C₂₅₀)
beta-Propiolactone
n-Propylamine
Propionitrile
n-Propylamine
Propylbenzene (all isomers)
Propylene oxide
Propylene tetramer
Propylene trimer
Rosin
Rosin soap (disproportionated) solution
Sodium dichromate solution (70% or less)
Sodium hydrogen sulphide (6% or less)/sodium carbonate (3% or less) solution
Sodium hydrosulphide/ammonium sulphide solution
Sodium hydrosulphide solution (45% or less)
Sodium nitrite solution
Sodium petroleum sulphonate
Styrene monomer
Sodium sulphide solution (15% or less)
Sodium thiocyanate solution (56% or less)
Styrene monomer
Sulpho hydrocarbon long-chain (C₁₈ +) alkylamine mixture
Sulphuric acid
Sulphuric acid, spent
Tall oil (crude and distilled)
Tall oil fatty acid, barium salt
Tall oil fatty acid (resin acids less than 20%)
Tall oil soap (disproportionated) solution
Tetrachloroethane
Tetramethylbenzene (all isomers)
Toluene

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Toluenediamine
Toluene diisocyanate
o-Toluidine
Tributyl phosphate
1,2,4-Trichlorobenzene
Trichloroethylene
Tricresyl phosphate (containing less than 1% ortho-isomer)
Tricresyl phosphate (containing 1% or more ortho-isomer)
Triethylamine
Triethylbenzene
Triethylenetetramine
Triethyl phosphite
Triisopropylated phenyl phosphates
Trimethylamine solution (30% or less)
Trimethylbenzene (all isomers)
Trinethylhexamethylene diisocyanate (2,2,4- and 2,4,4- isomers)
Tritolyl phosphate (Tricresyl phosphate)
Trixylyl phosphate
Turpentine
Undecanoic acid
1-Undecene
Undecyl alcohol
Vinylidene chloride
Vinyl neodecanoate
Vinyltoluene
White spirit, low (15 – 20%) aromatic
Xylenes
Xylenol
Zinc alkaryl dithiophosphate (C₇-C₁₆)
Zinc alkyl dithiophosphate (C₃-C₁₄)

3. Harmful substances in packaged form

Aldrin
Azinphos-ethyl
Azinphos-methyl
gamma-BHC

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Binapacryl
Brodifacoum
Bromophos-ethyl
Cadmium compound
Camphechlor
Carbophenothion
Chlordane
Chlorinated paraffins (C₁₀-C₁₃)
Chlorophenolates, liquid
Chlorpyrifos
Chlorthiophos
Copper metal powder
Coumaphos
Cresyl diphenyl phosphate
Cupric cyanide
Cupric sulphate
1,5,9-Cyclododecatriene
Cyhexatin
Cymenes (*ortho*-; *meta*-; *para*-)
Cymol
Cypermethin
DDT
Dialifos
Diazinon
Dichlofenthion
Dichlorvos
Dieldrin
Dimethoate
Diphenylamine chloroarsine
Diphenylchloroarsine, liquid
Diphenylchloroarsine, solid
Dodecylphenol
Endosulfan
Endrin
EPN

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Esfenvalerate
Ethion
Fenbutatin oxide
Fenitrothion
Fenpropathrin
Fenthion
Fentin acetate
Fentin hydroxide
Fonofos
Heptachlor
Hexachlorobutadiene
Hexachloro-1,3-butadiene
1,3-Hexachlorobutadiene
Isopropyltoluene
Isopropyltoluol
Isoxathion
Lindane
Mercuric acetate
Mercuric ammonium chloride
Mercuric arsenate
Mercuric benzoate
Mercuric bisulphate
Mercuric bromide
Mercuric chloride
Mercuric cyanide
Mercuric gluconate
Mercuric nitrate
Mercuric oleate
Mercuric oxide
Mercuric oxycyanide, desensitized
Mercuric potassium cyanide
Mercuric sulphate
Mercuric thiocyanate
Mercuriol
Mercurous acetate

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Mercurous bisulphate
Mercurous bromide
Mercurous chloride
Mercurous nitrate
Mercurous salicylate
Mercurous sulphate
Mercury acetate
Mercury ammonium chloride
Mercury-based pesticide, liquid, flammable, toxic, flashpoint less than 23°C c.c.
Mercury-based pesticide, solid, toxic
Mercury based pesticide liquid, toxic, flammable, flashpoint between 23 C and 61 C cc
Mercury benzoate
Mercury bichloride
Mercury bisulphate
Mercury bromides
Mercury compound, liquid, n.o.s.
Mercury compound, solid, n.o.s.
Mercury (I) (mercurous) compounds
Mercury (II) (mercuric) compounds
Mercury cyanide
Mercury gluconate
Mercury nucleate
Mercury oleate
Mercury oxide
Mercury oxycyanide, desensitized
Mercury potassium cyanide
Mercury potassium iodide
Mercury salicylate
Mercury thiocyanate
Methylpropylbenzenes
Mevinphos
Nickel carbonyl

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Nickel cyanide
Nickel tetracarbonyl
Organotin compound, liquid, n.o.s.
Organotin compound, solid, n.o.s.
Organotin compounds (pesticides)
Organotin pesticide, liquid, flammable, toxic, flashpoint less than 23°C c.c.
Organotin pesticide, liquid, toxic
Organotin pesticide, liquid, toxic, flammable, flashpoint between 23°C and 61°C c.c.
Organotin pesticide, solid, toxic
Osmium tetroxide
Parathion
Parathion-methyl
PCB's
Pentachlorophenol
Phenarsazine chloride
Phenthoate
Phenylmercuric acetate
Phenylmercuric compound. n.o.s
Phenylmercuric hydroxide
Phenylmercuric nitrate
Phorate
Phosalone
Phosphamidon
Phosphorus, white, dry
Phosphorus, white, molten
Phosphorus, white, under water
Phosphorus, yellow, dry
Phosphorus, yellow, molten
Phosphorus, yellow, under water
Polychlorinated biphenyls
Polyhalogenated biphenyls, liquid
Polyhalogenated biphenyls, solid

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Polyhalogenated terphenyls, liquid
Polyhalogenated terphenyls, solid
Potassium cuprocyanide
Potassium cyanocuprate (I)
Potassium cyanomercurate
Potassium mercuric iodide
Pyrazophos
Quizalofop
Quizalofop-P-ethyl
Sodium copper cyanide, solid
Sodium copper cyanide, solution
Sodium cuprocyanide, solid
Sodium cuprocyanide solution
Sodium pentachlorophenate
Sulprophos
White phosphorus, dry
White phosphorus, wet
Yellow phosphorus, dry
Yellow phosphorus, wet
Terbufos
Tetrachlorvinphos

4. Liquefied Gases (when carried in bulk)

Acetaldehyde
Anhydrous Ammonia
Anhydrous Hydrogen Chloride
Anhydrous Hydrogen Fluoride
Chlorine
Dimethylamine
Ethyl Chloride
Ethylene oxide
Methyl Bromide
Methyl Chloride
Sulphur Dioxide
Vinyl Chloride Monomer

5. Radioactive Substances

Radioactive substances, including, but not limited to, elements and compounds the isotopes of which are subject to the requirements of Section 835 of the Regulations for the Safe Transport of Radioactive Materials, 1973 Revised Edition, published by the International Atomic Energy Agency, and which may be found to be stored or transported as substances and/or materials in Type A packages, Type B packages, as fissile materials or materials transported under special arrangements, such as

$^{60}_{\text{Co}}$ $^{137}_{\text{Cs}}$ $^{226}_{\text{Ra}}$ $^{239}_{\text{Pu}}$ $^{235}_{\text{U}}$

6. Radioactive materials

Radioactive materials which are transported in type B packages, or as fissile materials, or under special arrangements, as covered by the provisions of schedules 10 to 13 of class 7 of the International Maritime Dangerous Goods Code.

SECOND SCHEDULE
(Section 15 (e))

**CONCILIATION AND ARBITRATION UNDER THE
INTERVENTION CONVENTION**

ANNEX TO THE INTERVENTION CONVENTION

CHAPTER 1— CONCILIATION

Article 1

Provided the Parties concerned do not decide otherwise, the procedure for conciliation shall be in accordance with the rules set out in this Chapter.

Article 2

1. A Conciliation Commission shall be established upon the request of one Party addressed to another in application of Article VIII of the Convention.
2. The request for conciliation submitted by a Party shall consist of a statement of the case together with any supporting documents.
3. If a procedure has been initiated between two Parties, any other Party the nationals or property of which have been affected by the same measures, or which is a coastal State having taken similar measures, may join in the conciliation procedure by giving written notice to the Parties which have originally initiated the procedure unless either of the latter Parties object to such joinder.

Article 3

1. The Conciliation Commission shall be composed of three members: one nominated by the coastal State which took the measures, one nominated by the State the nationals or property of which have been affected by those measures and a third, who shall preside over the Commission and shall be nominated by agreement between the two original members.

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2. The Conciliators shall be selected from a list previously drawn up in accordance with the procedure set out in Article 4 below.
3. If within a period of 60 days from the date of receipt of the request for conciliation, the Party to which such request is made has not given notice to the other Party to the controversy of the nomination of the Conciliator for whose selection it is responsible, or if, within a period of 30 days from the date of nomination of the second of the members of the Commission to be designated by the Parties, the first two Conciliators have not been able to designate by common agreement the Chairmen of the Commission, the Secretary-General of the Organization shall upon request of either Party and within a period of 30 days, proceed to the required nomination. The members of the Commission thus nominated shall be selected from the list prescribed in the preceding paragraph.
4. In no case shall the chairman of the Commission be or have been a national of one of the original Parties to the procedure, whatever the method of his nomination.

Article 4

1. The list prescribed in Article 3 above shall consist of qualified persons designated by the Parties and shall be kept up to date by the Organization. Each Party may designate for inclusion on the list four persons, who shall not necessarily be its nationals. The nominations shall be for periods of six years each and shall be renewable.
2. In the case of the decease or resignation of a person whose name appears on the list, the Party which nominated such person shall be permitted to nominate a replacement for the remainder of the term of office.

Article 5

1. Provided the Parties do not agree otherwise, the Conciliation Commission shall establish its own procedures, which shall in all cases permit a fair hearing. As regards examination, the Commission, unless it unanimously decides otherwise, shall conform with the

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provisions of Chapter III of the Hague Convention for the Peaceful Settlement of International Disputes of 18 October 1907.

2. The Parties shall be represented before the Conciliation Commission by agents whose duty shall be to act as intermediaries between the Parties and the Commission. Each of the Parties may seek also the assistance of advisers and experts nominated by it for this purpose and may request the hearing of all persons whose evidence the Party considers useful.
3. The Commission shall have the right to request explanations from agents, advisers and experts of the Parties as well as from any persons whom, with the consent of their Governments, it may deem useful to call.

Article 6

Provided the Parties do not agree otherwise, decisions of the Conciliation Commission shall be taken by a majority vote and the Commission shall not pronounce on the substance of the controversy unless all its members are present.

Article 7

The Parties shall facilitate the work of the Conciliation Commission and in particular, in accordance with their legislation, and using all means at their disposal:

- (a) provide the Commission with the necessary documents and information; and
- (b) enable the Commission to enter their territory, to hear witness or experts, and to visit the scene.

Article 8

The task of the Conciliation Commission will be to clarify the matters under dispute, to assemble for this purpose all relevant information by means of examination or other means, and to endeavour to reconcile the Parties. After examining the case, the Commission shall communicate to the Parties a recommendation which appears to

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the Commission to be appropriate to the matter and shall fix a period of not more than 90 days within which the Parties are called upon to state whether or not they accept the recommendation.

Article 9

The recommendation shall be accompanied by a statement of reasons. If the recommendation does not represent in whole or in part the unanimous opinion of the Commission, any Conciliator shall be entitled to deliver a separate opinion.

Article 10

A conciliation shall be deemed unsuccessful if, 90 days after the Parties have been notified of the recommendation, either Party shall not have notified the other Party of its acceptance of the recommendation. Conciliation shall likewise be deemed unsuccessful if the Commission shall not have been established within the period prescribed in the third paragraph of Article 3 above, or provided the Parties have not agreed otherwise, if the Commission shall not have issued its recommendation within one year from the date on which the Chairman of the Commission was nominated.

Article 11

1. Each member of the Commission shall receive remuneration for his work, such remuneration to be fixed by agreement between the parties which shall each contribute an equal proportion.
2. Contributions for miscellaneous expenditure incurred by the work of the Commission shall be apportioned in the same manner.

Article 12

The parties to the controversy may at any time during the conciliation procedure decide in agreement to have recourse to a different procedure for settlement of disputes.

CHAPTER II—ARBITRATION

Article 13

1. Arbitration procedure, unless the Parties decide otherwise, shall be in accordance with the rules set out in this Chapter.
2. Where conciliation is unsuccessful, a request for arbitration may only be made within a period of 180 days following the failure of conciliation.

Article 14

The Arbitration Tribunal shall consist of three members: one Arbitrator nominated by the coastal State which took the measures, one Arbitrator nominated by the State the nationals or property of which have been affected by those measures, and another Arbitrator who shall be nominated by agreement between the two first-named, and shall act as its Chairman.

Article 15

1. If, at the end of a period of 60 days from the nomination of the second Arbitrator, the Chairman of the Tribunal shall not have been nominated, the Secretary-General of the Organization upon request of either Party shall within a further period of 60 days proceed to such nomination, selecting from a list of qualified persons previously drawn up in accordance with the provisions of Article 4 above. This list shall be separate from the list of experts prescribed in Article IV of the Convention and from the list of Conciliators prescribed in Article 4 of the present Annex: the name of the same person may, however, appear both on the list of Arbitrators. A person who has acted as Conciliator in a dispute may not, however, be chosen to act as Arbitrator in the same matter.
2. If, within a period of 60 days from the date of the receipt of the request, one of the Parties shall not have nominated the member of the Tribunal for whose designation it is responsible, the other Party

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may directly inform the Secretary-General of the Organization who shall nominate the Chairman of the Tribunal within a period of 60 days, selecting him from the list prescribed in paragraph 1 of the present Article.

3. The Chairman of the Tribunal shall, upon nomination, request the Party which has not provided an Arbitrator, to do so in the same manner and under the same conditions. If the Party does not make the required nomination, the Chairman of the Tribunal shall request the Secretary-General of the Organization to make the nomination in the form and conditions prescribed in the preceding paragraph.
4. The Chairman of the Tribunal, if nominated under the provisions of the present Article, shall not be or have been a national of one of the Parties concerned, except with the consent of the other Party or Parties.
5. If the case of the decease or default of an Arbitrator for whose nomination one of the Parties is responsible, the said Party shall nominate a replacement within a period of 60 days from the date of decease or default. Should the said Party not make the nomination, the arbitration shall proceed under the remaining Arbitrators. In the case of decease or default of the Chairman of the Tribunal, a replacement shall be nominated in accordance with the provisions of Article 14 above, or in the absence of agreement between the members of the Tribunal within a period of 60 days of the decease or default, according to the provisions of the present Article.

Article 16

If a procedure has been initiated between two Parties, any other Party, the nationals or property of which have been affected by the same measures or which is a coastal State having taken similar measures, may join in the arbitration procedure by giving written notice to the Parties which have originally initiated the procedure unless either of the latter Parties object to such joinder.

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Article 17

Any Arbitration Tribunal established under the provisions of the present Annex shall decide its own rules of procedure.

Article 18

1. Decisions of the Tribunal both as to its procedure and its place of meeting and as to any controversy laid before it, shall be taken by majority vote of its members; the absence or abstention of one of the members of the Tribunal for whose nomination the Parties were responsible shall not constitute an impediment to the Tribunal reaching a decision. In cases of equal voting, the Chairman shall cast the deciding vote.
2. The Parties shall facilitate the work of the Tribunal and in particular, in accordance with their legislation, and using all means at their disposal:
 - (a) provide the Tribunal with the necessary documents and information;
 - (b) enable the Tribunal to enter their territory, to hear witnesses or experts, and to visit the scene.
3. Absence or default of one Party shall not constitute an impediment to the procedure.

Article 19

1. The award of the Tribunal shall be accompanied by a statement of reasons. It shall be final and without appeal. The Parties shall immediately comply with the award.
2. Any controversy which may arise between the Parties as regards interpretation and execution of the award may be submitted by either Party for judgement to the Tribunal which made the award, or, if it is not available, to another Tribunal constituted for this purpose in the same manner as the original Tribunal.

THIRD SCHEDULE

(Sections 20 and 22)

DUMPING OF WASTES

**WASTES OR OTHER MATTER THAT MAY BE
CONSIDERED FOR DUMPING**

1. The following wastes or other matter are those that may be considered for dumping being mindful of the Objectives and General Obligations of the Convention set out in articles 2 and 3:
 1. dredged material;
 2. sewage sludge;
 3. fish waste, or material resulting from industrial fish processing operations;
 4. vessels and platforms or other man-made structures at sea;
 5. inert, inorganic geological material;
 6. organic material of natural origin; and
 7. bulky items primarily comprising iron, steel, concrete and similarly unarmful materials for which the concern is physical impact, and limited to those circumstances where such wastes are generated at locations, such as small islands with isolated communities, having no practicable access to disposal options other than dumping.
2. The wastes or other matter listed in paragraphs 1.4 and 1.7 may be considered for dumping, provided that material capable of creating floating debris or otherwise contributing to pollution of the marine environment has been removed to the maximum extent and provided that the material dumped poses no serious obstacle to fishing or navigation.

Notwithstanding the above, materials listed in paragraphs 1.1 to 1.7 containing levels of radioactivity greater than *de minimis* (exempt) concentrations as defined by the IAEA and adopted by

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Contracting Parties, shall not be considered eligible for dumping; provided further that within 25 years of 20 February 1994, and at each 25 year interval thereafter, Contracting Parties shall complete a scientific study relating to all radioactive wastes and other radioactive matter other than high level wastes or matter, taking into account such other factors as Contracting Parties consider appropriate and shall review the prohibition on dumping of such substances in accordance with the procedures set forth in article 22.

**ASSESSMENT OF WASTES OR OTHER MATTER THAT
MAY BE CONSIDERED FOR DUMPING**

General

1. The acceptance of dumping under certain circumstances shall not remove the obligations under this Annex to make further attempts to reduce the necessity for dumping.

Waste Prevention Audit

2. The initial stages in assessing alternative to dumping should, as appropriate, include an evaluation of:
 1. types, amounts and relative hazard of waste generated;
 2. clean production technologies;
 3. details of the production process and the sources of wastes within that process; and
 4. feasibility of the following waste reduction/prevention techniques;
 1. product reformulation;
 2. clean production technologies
 3. process modification;
 4. input substitution; and
 5. on-site, closed-loop recycling.

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3. In general terms, if the required audit reveals that opportunities exist for waste prevention at source, an applicant is expected to formulate and implement a waste prevention strategy, in collaboration with relevant local and national agencies, which includes specific waste reduction targets and provision for further waste prevention audits to ensure that these targets are being met. Permit issuance or renewal decisions shall assure compliance with any resulting waste reduction and prevention requirements.
4. For dredged material and sewage sludge, the goal of waste management should be to identify and control the sources of contamination. This should be achieved through implementation of waste prevention strategies and requires collaboration between the relevant local and national agencies involved with the control of point and non-point sources of pollution. Until this objective is met, the problems of contaminated dredged material may be addressed by using management techniques at sea or on land.

Consideration of waste management options

5. Applications to dump wastes or other matter shall demonstrate that appropriate consideration has been given to the following hierarchy of waste management options, which implies an order of increasing environmental impact:
 1. re-use;
 2. off-site recycling;
 3. destruction of hazardous constituents;
 4. treatment to reduce or remove the hazardous constituents; and
 5. disposal on land, into air and in water.
6. A permit to dump wastes or other matter shall be refused if the permitting authority determines that appropriate opportunities exist to re-use, recycle or treat the waste without undue risks to human health or the environment or disproportionate costs. The practical availability of other means of disposal should be considered in the light of a comparative risk assessment involving both dumping and the alternatives.

Chemical, physical and biological properties

7. A detailed description and characterisation of the waste is an essential precondition for the consideration of alternatives and the basis for a decision as to whether a waste may be dumped. If a waste is so poorly characterised that proper assessment cannot be made of its potential impacts on human health and the environment, that waste shall not be dumped.
8. Characterisation of the wastes and their constituents shall take into account:
 1. origin, total amount, form and average composition;
 2. properties: physical, chemical, biochemical and biological;
 3. toxicity;
 4. persistence: physical, chemical and biological; and
 5. accumulation and biotransformation in biological materials or sediments.

Action list

9. Each Contracting Party shall develop a national Action list to provide a mechanism for screening candidate wastes and their constituents on the basis of their potential effects on human health and the marine environment. In selecting substances for consideration in an Action list, priority shall be given to toxic, persistent and bioaccumulative substances from anthropogenic sources (e.g., cadmium, mercury, organohalogens, petroleum hydrocarbons, and, whenever relevant, arsenic, lead, copper, zinc, beryllium, chromium, nickel and vanadium, organosilicon compounds, cyanides, fluorides and pesticides or their by-products other than organohalogens). An Action list can also be used as a trigger mechanism for further waste prevention considerations.
10. An Action list shall specify an upper level and may also specify a lower level. The upper level should be set so as to avoid acute or chronic effects on human health or on sensitive marine organisms representative of the marine ecosystem. Application of an Action list will result in three possible categories of waste:
 1. wastes which contain specified substances, or which cause biological responses, exceeding the relevant upper level shall not be dumped,

unless made acceptable for dumping through the use of management techniques or processes;

2. wastes which contain specified substances, or which cause biological responses, below the relevant lower levels should be considered to be of little environmental concern in relation to dumping; and
3. wastes which contain specified substances, or which cause biological responses, below the upper level but above the lower level require more detailed assessment before their suitability for dumping can be determined.

Dump site selection

11. Information required to select a dump site shall include:
 1. physical, chemical and biological characteristics of the water-column and the seabed;
 2. location of amenities, values and other uses of the sea in the area under consideration;
 3. assessment of the constituent fluxes associated with dumping in relation to existing fluxes of substances in the marine environment; and
 4. economic and operational feasibility.

Assessment of potential effects

12. Assessment of potential effects should lead to a concise statement of the expected consequences of the sea or land disposal options, i.e., the “Impact Hypothesis”. It provides a basis for deciding whether to approve or reject the proposed disposal option and for defining environmental monitoring requirements.
13. The assessment for dumping should integrate information on waste characteristics, conditions at the proposed dump-site(s), fluxes and proposed disposal techniques and specify the potential effects on human health, living resources, amenities and other legitimate uses of the sea. It should define the nature, temporal and spatial scales and duration of expected impacts based on reasonably conservative assumptions.

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14. An analysis of each disposal option should be considered in the light of a comparative assessment of the following concerns: human health risks, environmental costs, hazards, (including accidents), economics and exclusion of future uses. If this assessment reveals that adequate information is not available to determine the likely effects of the proposed disposal option then this option should not be considered further. In addition, if the interpretation of the comparative assessment shows the dumping option to be less preferable, a permit for dumping should not be given.
15. Each assessment should conclude with a statement supporting a decision to issue or refuse a permit for dumping.

Monitoring

16. Monitoring is used to verify that permit conditions are met – compliance monitoring – and that the assumptions made during the permit review and site selection process were correct and sufficient to protect the environment and human health – field monitoring. It is essential that such monitoring programmes have clearly defined objectives.

Permit and permit conditions

17. A decision to issue a permit should only be made if all impact evaluations are completed and the monitoring requirements are determined. The provisions of the permit shall ensure, as far as practicable, that environmental disturbance and detriment are minimised and the benefits maximised. Any permit issued shall contain data and information specifying:
 1. the types and sources of materials to be dumped;
 2. the location of the dump site(s);
 3. the method of dumping; and
 4. monitoring and reporting requirements.
18. Permits should be reviewed at regular intervals, taking into account the results of monitoring and the objectives of monitoring

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programmes. Review of monitoring results will indicate whether field programmes need to be continued, revised or terminated and will contribute to informed decisions regarding the continuance, modification or revocation of permits. This provides an important feedback mechanism for the protection of human health and the marine environment.

FOURTH SCHEDULE

(Section 30(2))

1996 PROTOCOL TO THE LONDON CONVENTION

ARTICLE 16

SETTLEMENT OF DISPUTES

1. Any disputes regarding the interpretation or application of this Protocol shall be resolved in the first instance through negotiation, mediation or conciliation, or other peaceful means chosen by parties to the dispute.
2. If no resolution is possible within twelve months after one Contracting Party has notified another that a dispute exists between them, the dispute shall be settled, at the request of a party to the dispute, by means of the Arbitral Procedure set forth in Annex 3, unless the parties to the dispute agree to one of the procedures listed in paragraph 1 of Article 287 of the 1982 United Nations Convention on the Law of the Sea. The parties to the dispute may so agree, whether or not they are also States Parties to the 1982 United Nations Convention on the Law of the Sea.
3. In the event an agreement to use one of the procedures listed in paragraph 1 of Article 287 of the 1982 United Nations Convention on the Law of the Sea is reached, the provisions set forth in Part XV of that Convention that are related to the chosen procedure would also apply, *mutatis mutandis*.
4. The twelve month period referred to in paragraph 2 may be extended for another twelve months by mutual consent of the parties concerned.
5. Notwithstanding paragraph 2, any State may, at the time it expresses its consent to be bound by this Protocol, notify the Secretary-General that, when it is a party to a dispute about the interpretation or application of article 3.1 or 3.2, its consent will be required before the dispute may be settled by means of the Arbitral Procedure set forth in Annex 3.

**ANNEX 3 TO 1996 PROTOCOL TO LONDON
CONVENTION**

ARBITRAL PROCEDURE

ARTICLE 1

1. An Arbitral Tribunal (hereinafter referred to as the “Tribunal”) shall be established upon the request of a contracting Party addressed to another Contracting Party in application of article 16 of this Protocol. The request for arbitration shall consist of a statement of the case together with any supporting documents.
2. The requesting Contracting Party shall inform the Secretary-General of:
 1. Its request for arbitration; and
 2. The provisions of this Protocol the interpretation or application of which is, in its opinion, the subject of disagreement.
 3. The Secretary-General shall transmit this information to all Contracting States.

ARTICLE 2

1. The Tribunal shall consist of a single arbitrator if so agreed between the parties to the dispute within 30 days from the date of receipt of the request for arbitration.
2. In the case of the death, disability or default of the arbitrator, the parties to a dispute may agree upon a replacement within 30 days of such death, disability or default.

ARTICLE 3

1. Where the parties to a dispute do not agree upon a Tribunal in accordance with article 2 of this Annex, the Tribunal shall consist of three members:

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1. one arbitrator nominated by each party to the dispute; and
 2. a third arbitrator who shall be nominated by agreement between the two first named and who shall act as its Chairman.
2. If the Chairman of a Tribunal is not nominated within 30 days of nomination of the second arbitrator, the parties to a dispute shall, upon the request of one party, submit to the Secretary-General within a further period of 30 days an agreed list of qualified persons. The Secretary-General shall select the Chairman from such list as soon as possible. He shall not select a Chairman who is or has been a national of one party to the dispute except with the consent of the other party to the dispute.
 3. If one party to a dispute fails to nominate an arbitrator as provided in paragraph 1.1 within 60 days from the date of receipt of the request for arbitration, the other party may request the submission to the Secretary-General within a period of 30 days of an agreed list of qualified persons. The Secretary-General shall select the Chairman of the Tribunal from such list as soon as possible. The chairman shall then request the party which has not nominated an arbitrator to do so. If this party does not nominate an arbitrator within 15 days of such request, the Secretary-General shall, upon request of the Chairman, nominate the arbitrator from the agreed list of qualified persons.
 4. In the case of the death, disability or default of an arbitrator, the party to the dispute who nominated him shall nominate a replacement within 30 days of such death, disability or default. If the party does not nominate a replacement, the arbitration shall proceed with the remaining arbitrators. In the case of the death, disability or default of the Chairman, a replacement shall be nominated in accordance with the provision of paragraphs 1.2 and 2 within 90 days of such death, disability or default.
 5. A list of arbitrators shall be maintained by the Secretary-General and composed of qualified persons nominated by the Contracting Parties.

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Each Contracting Party may designate for inclusion in the list four persons who shall not necessarily be its nationals. If the parties to the dispute have failed within the specified time limits to submit to the Secretary-General an agreed list of qualified persons as provided for in paragraphs 2, 3 and 4, the Secretary-General shall select from the list maintained by him the arbitrator or arbitrators not yet nominated.

ARTICLE 4

The Tribunal may hear and determine counter-claims arising directly out of the subject matter of the dispute.

ARTICLE 5

Each party to the dispute shall be responsible for the costs entailed by the preparation of its own case. The remuneration of the members of the Tribunal and of all general expenses incurred by the arbitration shall be borne equally by the parties to the dispute. The Tribunal shall keep a record of all its expenses and shall furnish a final statement thereof to the parties.

ARTICLE 6

Any Contracting Party which has an interest of a legal nature which may be affected by the decision in the case may, after giving written notice to the parties to the dispute which have originally initiated the procedure, intervene in the arbitration procedure with the consent of the Tribunal and at its own expense. Any such intervenor shall have the right to present evidence, briefs and oral argument on the matters giving rise to its intervention, in accordance with procedures established pursuant to article 7 of this Annex, but shall have no rights with respect to the composition of the Tribunal.

ARTICLE 7

A Tribunal established under the Provisions of this Annex shall decide its own rules of procedure.

ARTICLE 8

1. Unless a Tribunal consists of a single arbitrator, decisions of the Tribunal as to its procedure, its place of meeting, and any question related to the dispute laid before it, shall be taken by majority vote of its members. However, the absence or abstention of any member of the Tribunal who was nominated by a party to the dispute shall not constitute an impediment to the Tribunal reaching a decision. In case of equal voting, the vote of the Chairman shall be decisive.
2. The parties to the dispute shall facilitate the work of the Tribunal and in particular shall, in accordance with their legislation and using all means at their disposal.
 1. Provide the Tribunal with all necessary documents and information; and
 2. Enable the Tribunal to enter their territory, to hear witnesses or experts, and to visit the scene.
3. The failure of a party to the dispute to comply with the provisions of paragraph 2 shall not preclude the Tribunal from reaching a decision and rendering an award.

ARTICLE 9

The tribunal shall render its award within five months from the time it is established unless it finds it necessary to extend that time limit for a period not to exceed five months. The award of the Tribunal shall be accompanied by a statement of reasons for the decision. It shall be final and without appeal and shall be communicated to the Secretary-General who shall inform the Contracting Parties. The parties to the dispute shall immediately comply with the award.

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FIFTH SCHEDULE

(Sections 37(9) and 74 (4))

**SUBSTANCES LISTED IN APPENDIX I TO ANNEX I OF
MARPOL**

I—LIST OF OILS

Asphalt solutions

Gasolines

Blending stocks (natural)	Casinghead
Roofers flux Automotive	
Straight run residue	Aviation
Straight run	

Oils

Fuel oil no. 1 (kerosene)	
Fuel oil no. 1-D	
Clarified	
Fuel oil no. 2	
Crude Oil	
Fuel oil no. 2-D	
Mixtures containing crude oil	
Diesel oil	
Jet fuels	
Fuel oil no. 4	
Fuel oil no. 5	JP-1(kerosene)
Fuel oil no. 6	JP-3

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Residual fuel oil	JP-4	
Road oil (kerosene, heavy)		JP-5
Transformer oil	Turbo fuel	
Aromatic oil (excluding vegetable oil)	Kerosene	
Lubricating oils and blending stocks	Mineral spirit	
Mineral oil		
Motor Oil		
Naphtha		
Penetrating oil		
Spindle oil	Solvent	
Turbine oil		
Petroleum		
Heartcut distillate oil		

Distillates

Straight run
Flashed feed stocks

Gas Oil

Cracked

Gasoline blending stocks

Alkylates – fuel
Reformats
Polymer – fuel

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

SIXTH SCHEDULE
(Section 55)

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 organisation authorised under the provisions of the Convention)

Particulars of ship*

Name of ship.....

Distinctive number of letters:.....

Port of registry:

Gross tonnage:

Deadweight of ship (tonnes)†

IMO Number‡

*Alternatively, the particulars of the ship may be placed horizontally in boxes.
+ For oil tankers
+ In accordance with resolution a.600 (15), IMO Ship Identification Number Scheme, this information may be included voluntarily.

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Appendixes to Annex 1

Type of ship*

Oil Tanker

Ship other than oil tanker with cargo tanks coming under regulation 2(2) of Annex 1 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 1 of the Convention.
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(dd/mm/yyyy).....†
subject to surveys in accordance with regulation 6 of Annex I of the Convention.

Issued at
(Place of issue of certificate)

(Date of issue)

(Signature of authorised official issuing the certificate)

(Seal or stamp of the authority, as appropriate)

*Delete as appropriate

†Insert the date of expiry as specified by the Administration in accordance with regulation 10(1) of Annex I of the Convention. The day and the month of this date 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.

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ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that at a survey required by regulation 6 of Annex 1 of the Convention the ship was found to comply with the relevant provisions of the Convention:

Annual survey: Signed.....
(Signature of duly authorised officer)
Place
Date

(Seal or stamp of the authority, as appropriate)

Annual /Intermediate* survey : Signed.....
(Signature of duly authorised officer)
Place
Date

(Seal or stamp of the authority, as appropriate)

Annual/Intermediate* survey : Signed.....
(Signature of duly authorised officer)
Place
Date

(Seal or stamp of the authority, as appropriate)

Annual survey: Signed.....
(Signature of duly authorised officer)
Place
Date

(Seal or stamp of the authority, as appropriate)

*delete as appropriate

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Annex I: Regulations for the Prevention of Pollution by Oil
Appendix II: Form of IOPP Certificate and Supplements

**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 1 of the Convention, the ship was found to comply with the relevant provisions of the Convention: the ship was found to comply with the relevant provisions of the Convention.

Signed:

(Signature of duly authorised 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 1 of the Convention be accepted as valid until (dd/mm/yy):

Signed:

(Signature of duly authorised official)

Place:

Date: (dd/mm/yyyy):

(Seal or stamp of the authority, as appropriate)

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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 1 of the Convention be accepted as valid until (dd/mm/yyyy)

Signed:

(Signature of duly authorised official)

Place:

Date: (dd/mm/yyyy):.....

(Seal or stamp of the authority, as appropriate)

**Delete as appropriate*

Appendices to Annex 1

Appendix II: Form of IOPP Certificate and Supplements

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 1 of the Convention, be accepted as valid until (dd/mm/yyyy).....

Signed:

(Signature of duly authorised official)

Place:

Date: (dd/mm/yyyy):

(Seal or stamp of the authority, as appropriate)

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**ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE
WHERE REGULATION 10.8 APPLIES**

In accordance with regulation 10.8 of Annex 1 of the Convention, the new anniversary date is (dd/mm/yyyy):

Signed:

(Signature of duly authorised official)

Place:

Date: (dd/mm/yyyy):

(Seal of stamp of the authority, as appropriate)

In accordance with regulation 10.8 of Annex 1 of the Convention the new anniversary Date is (dd/mm/yyyy):

Signed:

(Signature of duly authorised official)

Place:

Date: (dd/mm/yyyy):

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate

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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 1 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. “ship 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 1 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 1 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

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- 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 “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

* Refer to the recommendation on international performance and test specifications of oily-water separating equipment and oil content meters adopted by the organization on 14 November, 1977 by resolution A.393 (x), which superseded resolution A.233 (VII); see IMO sales publication IMO-60SE. 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 Organisation by resolution MEPC 60 (33), which, effective on 6th July, 1993, superseded resolution a. 393 (x) and A.444 (xI) see IMO sales publication IMO-646E.

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- 2.3.2 The process unit has been approved in accordance with resolution A.444(XI)
- 2.3.3 The oil content meter
1. been approved in accordance with resolution A.393 (X)
 2. been approved in accordance with MEPC resolution 60 (33)
 3. has been approved in accordance with resolution MEPC 107 (49)
- 2.4 Maximum throughput of the system ism³/h
- 2.5 Waiver of regulation 14:
- 2.5.1 The requirements of regulation 14.1 or 14. 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 Safety for High Speed Craft and engaged in a scheduled service with a turn around time not exceeding 24 hours
- 2.5.2. The ship is fitted with holding tank(s) for its 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:

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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, capacityl/h
- 3.2.2 Auxiliary boiler suitable for burning oil residues
- 3.2.3 Tank for mixing oil residues with fuel oil, capacitym³
- 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)	

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 and reception facilities fitted with a standard discharge connection in accordance with regulation 13.

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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 III of Annex I of the Convention in accordance with regulation 3.1 (a) on those items listed under paragraph(s)
.....
.....of this Record.

7. Equivalents

(regulation 5)

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

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

Issued at
(Place of issue of the Record)

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

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

FORM B

Supplement to International Oil Pollution Prevention Certificate

(IOPP Certificate)

RECORD OF CONSTRUCTION AND EQUIPMENT FOR OIL TANKERS

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

Notes:

1. This form is to be used for the first two types of ships as categorised in the IOPP Certificate, i.e. “oil tankers” and “ships” other than oil tankers with cargo tanks coming under regulation 2 (2) of Annex 1 of the Convention”. For the third type of ships as categorised in the IOPP Certificate Form A shall be used.
2. This Record shall be permanently attached to the IOPP Certificate. The IOPP Certificate shall be available on board the ship at all times.
3. 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 the 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 1 of the Convention and resolutions

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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 (m³)
- 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 31st 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 1st June 1982” under regulation 1.28.3 due to unforeseen delay in delivery.

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- 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 1 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:

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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

**Refer to the Recommendation on international performance and test specifications of oily-water separating equipment and oil content meters adopted by the Organization on 14 November 1977 by resolution A.393(X), which superseded resolution A.233 (VII); 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); and the revised Guidelines and specifications for pollution prevention equipment for machinery spaces of ships adopted by the MEPC of the Organisation by resolution MEPC 107 (49) which effective from 1 January 2005 superseded resolutions MEPC 60 (33) A.393(X) and A.444(XI).

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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 ism³/h

2.5 Waiver of regulation 14

2.5.1 The requirements of regulation 14.1 or 14.2 are waived in respect of the ship in accordance with regulation 14(5).

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

.....

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

Tank Identification	Tank Location		Volume(m ³)
	Frames (from) – (to)	Lateral position	
		Total volume:m ³	

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

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

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

Tank Identification	Tank Location		Volume(m ³)
	Frames (from) – (to)	Lateral position	
		Total volume:m ³	

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

3.2.1 Incinerator for oil residues, capacityl/h

3.2.2 Auxiliary boiler suitable for burning oil residues

3.2.3 Tank for mixing oil residues with fuel oil, capacitym³

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	

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4. Standard discharge connection
(regulation 13)

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 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 regulation 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):

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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 resolution A497(XII) and A 897(21)

* See IMO sales publication IMO-617E

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- 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 resolution A 497(XII) and A897(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 in a written procedure approved by the Administration.
- 5.8 Double hull construction:

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- 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. allowed to continue operation in accordance with regulation 20.5 Until
 - 3. 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 subject 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. allowed to continue operation I n accordance with regulation 21.6.2 until.....
 - 5. is exempted from the provisions of regulation 21 in accordance with regulation 2.1.7.2
- 5.8.7. The ship is not subject to regulation 21
- 5.8.8. The ship is subject to regulation 22 and:

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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)* deleted 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

* meters adopted by the Organization by resolution a. 393 (x). For oil meters as part of discharge monitoring and control systems installed on tankers built on or after 2 October, 1986, refer to the Guidelines and specification for oil discharge monitoring and control systems for oil tankers adopted by the organization by resolution A. 586 (14);

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6.1.6 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 ofm³ 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 regulation 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 regulations 31 and 32

6.5.1 The requirements of regulation 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
.....

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

7.1 The overboard discharge outlets for segregated ballast are located:

7.1.1 Above the waterline

7.1.2 Below the waterline

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

7.2.1 Above the waterline

7.2.2 Below the waterline

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

* Refer to the Specification for oil/water interface detectors adopted by the Marine Environment Protection Committee of the organisation by resolution MEPC.5 (XIII); only those outlets which can be monitored are to be indicated.

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8. Shipboard oil/ 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 Annex 1 of the Convention in accordance with regulation 3.1 or those items listed under paragraph(s)
.....of this Record Book

10. Equivalentents — (regulation 5)

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

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

Issued at
(Place of issue of the Record)

.....
Dd/mm/yyyy).....

Date of issue

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

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

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SEVENTH SCHEDULE

(Section 71 (4))

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.

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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 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, 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 Part 1 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 1 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 1 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 1.

The entries in the Oil Record Book Part 1, 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 1 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.

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The competent authority of the Government of a Party to the Convention may inspect the Oil Record Book Part 1 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 1 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 1 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 cubic metres)
 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 cubic metres.

(B) Discharge of dirty ballast or cleaning water from oil fuel tanks referred to under section (A).

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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 cubic metres

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

11. Collection of oil residues.

Quantities of oil residues (sludge and other residues) 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. separated sludge (sludge resulting from purification of fuel and lubricating oils) and other residues, if applicable:
 - 1 identity of tank(s)
 - 2 capacity of tank(s)m³
 - 3 total quantity of retentionm³
12. Methods of disposal of residue.

State quantity of oil residues disposed of, the tank(s) emptied and the quantity of contents retained in cubic metres:

 1. to reception facilities (identify port): ²
 2. transferred to another (other) tank(s) (indicated tank(s) and the total content of tank(s));
 3. incinerated (indicate total time of operation);
 4. other method (state which).

(D) Non-automatic discharge overboard or disposal otherwise of bilge water which has accumulated in machinery spaces

13. Quantity discharged or disposed of.
14. Time of discharge or disposal (start and stop).

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15. Method of discharge or disposal:
 1. through 15 ppm equipment (state position at start and end):
 2. to reception facilities (identify port):*
 3. transfer to slop tank or holding tank (indicate tank(s): state quantity retained in tanks(s)) in cubic metres).

(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.
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)).

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- .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

MACHINERY SPACE OPERATIONS

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

Signature of master

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OIL RECORD BOOK - PART II

Cargo/ballast operations -(Oil tankers)

Name of ship:

Distinctive number or letters:

Gross tonnage:

Period from: _____ to: _____

Name of ship.....

Distinctive number or letters

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.

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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 sections, 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 counter signed by the master of the ship. In respect of the oil tankers engaged in specific trades in accordance with regulation 25 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 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

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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 the 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.

* This sentence should 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 cubic metres, at 151°c and the total Content of tank(s) in cubic metres.

(B) Internal transfer of oil cargo during voyage

4. Identity of tank(s):
 1. from:
 2. to: (state quantity transferred and total quantity of tanks in cubic metres)
5. Was (were) the tank(s) in 4.1 emptied? (If not, state quantity retained in cubic metres)

(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 in cubic metres)

(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.
11. Number of machines in use.
12. Time of start of washing.
13. Washing pattern employed. *

* 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 are covered by the machines and the number of times that are covered for that particular stage of the programme.

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14. Washing line pressure.
15. Time washing was completed or stopped.
16. State method of establishing that tank(s) was (were) dry.
17. Remarks.

(E) Ballasting of cargo tanks

18. Position of ship at start and end of ballasting.
19. Ballasting process:
 1. identity of tank(s) ballasted:
 2. time of start and end:
 3. quantity of ballast received. Indicate total quantity of ballast for each tank involved in the operation in cubic metres.

(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, in cubic metres
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 cubic metres.

(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. *

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

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31. Tank washings transferred to:
 1. reception facilities (state port and quantity in cubic metres);
 2. slop tank(s) or cargo tank(s) designated as slop tank(s) (identify tank(s); state quantity transferred and total quantity in cubic metres).

(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 cubic metres.
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 cubic metres.
40. Discharged to shore reception facilities (identify port and quantity involved in cubic metres).*

(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.

* 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 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 all alleged pollution incident. The receipt or certificate should be kept together with the Oil Record Book.

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46. Ullage of oil/water interface at start of discharge.
47. Bulk quantity discharged in cubic metres and rate of discharge in m³ /hour
48. Final quantity discharged in cubic metres and rate of discharge in m³ /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 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 mixture not otherwise dealt with

55. Identity of tank(s).
56. Quantity disposed of from each tank. (State the quantity retained in cubic metres).
57. Method of disposal:
 1. to reception facilities (identify port and quantity involved):*
 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 cubic metres; and
 4. other method (state which); state quantity disposed of in cubic metres.

* 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 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 all alleged pollution incident. The receipt or certificate should be kept together with the Oil Record Book.

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(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, in cubic metres:
 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.

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- 75. Approximate quantity in cubic metres 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

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CARGO/BALLAST OPERATIONS (OIL TANKERS)

EIGHTH SCHEDULE

(Sections 37(9) and 79 (2) (b))

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

Signature of master:

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LIST OF NOXIOUS LIQUID SUBSTANCES CARRIED IN BULK

Noxious liquid substances carried in bulk and which are presently categorised as Category X, Y, Z and other substances 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.

NINTH SCHEDULE

(Section 79 (2 (a)))

GUIDELINES FOR THE CATEGORISATION 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 effect	E2 Effects on marine wildlife and on benthic habitats	Cat	
1			≥ 5				X	
2	≥ 4		4					
3		NR	4					
4	≥ 4	NR			CMRTNI			
5			4				Y	
6			3					
7			2					
8	≥ 4	NR		Not 0				
9				≥ 1		F _p , F or S If not inorganic		
10								
11					CMRTNI		Z	
12	Any product not meeting the criteria of rules 1 to 11 and 13							OS
13	All products identified as: ≥ 2 in column A1; R in column A2; blank in column D3; not F _p , F or S (if not organic) in column E2; and 0 (zero) in all other columns of the GESAMP Hazard Profile							

Abbreviated legend to the revised GESAMP Hazard Evaluation Procedure

Columns A and B - Aquatic environment					
Numerical rating	Bioaccumulation and biodegradation			Aquatic toxicity	
	A1*		A2*	B1*	B2*
	log Pow	Bioaccumulation	Biodegradation	Acute toxicity	Chronic toxicity
		BCF		LC50/OC50 (mg/l)	NOEC (mg/l)
0	<1 of >ca.7	not measurable	R: readily Biodegradable	> 1000	> 1
1	≥ 1 - < 2	≥ 1 - < 10		> 100 - ≤ 100	> 0.1 - ≤ 1
2	≥ 2 - < 3	≥ 10 - < 100		> 10 - ≤ 100	> 0.01 - ≤ 0.1
3	≥ 3 - < 4	≥ 100 - < 500	NR: not readily biodegradable	> 1 - ≤ 10	> 0.001 - ≤ 0.01
4	≥ 4 - < 5	≥ 500 - < 4000		> 0.1 - ≤ 1	≤ 0.001
5	≥ 5 - < ca.7	≥ 4000	Inorg: inorganic Substance	> 0.01 - ≤ 0.1	
6				≤ 0.01	

* These columns are used to define pollution categories

Abbreviated legend to the revised GESAMP Hazard Evaluation Procedure (continued)

Columns C and D – Human health (Toxic effects to mammals)						
Numerical rating	C			D		
	Acute mammalian toxicity			Irritation, corrosion & long-term health effects		
	C1 Oral toxicity LD ₅₀ (mg/kg)	C2 Percutaneous Toxicity LD ₅₀ (mg/kg)	C3 Inhalation Toxicity LC ₅₀ (mg/l)	D1 Skin irritation & corrosion	D2 Eye irritation & corrosion	D3* Long-term Health effects
0	> 2000	> 2000	>20	not irritating	not irritating	C - Carcinogen
1	>300 - ≤ 2000	>1000 - ≤ 2000	>10 - ≤ 20	mildly irritating	mildly irritating	M - Mutagenic
2	>50 - ≤ 300	>200 - ≤ 1000	> 2 - ≤ 10	irritating	irritating	R - Reprotoxic
3	> 5 - ≤ 50	>50 - ≤ 200	> 0.5 - ≤ 2	Severely irritating or corrosive 3A Corr. (≤ 4 h) 3B Corr. (≤ 1 h) 3C Corr. (≤ 3 min)	severely irritating	S - Sensitizing A - Aspiration Hazard T - Target organ Systemic Toxicity L - Lung injury N - Neurotoxic I - Immuno-toxic
4	≤ 5	≤ 50	≤ 0.5			

* These columns are used to define pollution categories

Abbreviated legend to the revised GESAMP Hazard Evaluation Procedure

Column E Interferences with other uses of the sea		
E1 Tainting	E2* Physical effects on wildlife & benthic habitats	E3 Interference with coastal amenities
		Numerical rating
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, not closure of amenity
		2 moderately objectionable possible closure of amenity
		3 highly objectionable closure of amenity

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TENTH SCHEDULE

(Section 80)

LIST OF OTHER LIQUID SUBSTANCES

Liquid substances carried in bulk which are identified as falling outside Categories, X, Y, Z and other substances subject to the provisions of this Annex and indicated as 'III' in the Pollution Category column of chapters 17 or 18 of the International Bulk Chemical Code.

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ELEVENTH SCHEDULE

(Section 99 (1))

**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

**PLAN VIEW OF CARGO AND SLOP TANKS
(TO BE COMPLETED ON BOARD)**

The diagram shows a plan view of a ship's hull on the left and a table on the right. The hull diagram is a vertical oval shape with a pointed top and a pointed bottom. It is divided into several horizontal sections. The bottom-most section is labeled "Pumproom". The table to the right has two columns: "Identification of the tanks" and "Capacity". The table has 14 rows. The 11th and 12th rows from the top are crossed out with a diagonal line.

Identification of the tanks	Capacity

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 authorised 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 only 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 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. ventilation procedure used (state number of fans used, duration of ventilation).

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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 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 authorised surveyors

29. Identify port.

30. Identify tank(s), substance(s), category(ies) discharged ashore.

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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.
36. Name and signature of authorised surveyor.
37. Organisation, company, government agency for which surveyor works.

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(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 authorised surveyor

.....
(Signature of Master)

TWELFTH SCHEDULE

(Section 109)

FORM OF NOXIOUS LIQUID SUBSTANCE CERTIFICATE

**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 (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 organisation
authorised under the provisions of the Convention)

Particulars of ship*

Name of ship

Distinctive number or letters

Port of registry

Gross tonnage

IMO Number †

THIS IS TO CERTIFY

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

+ In accordance with resolution a. 600 (15), IMO Ship Identification Number Scheme, this information may be included voluntarily.

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1. That the ship has been surveyed in accordance with the provisions of 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 of 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)	Pollution Category
*continued on additional signed and dated sheets		

This certificate is valid until (dd/mm/yyyy).....subject to surveys in accordance with regulation 8 of Annex II of the Convention.

Completion date of the survey on which the certificate is based (dd/mm/yyyy).....

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Issued at
(Place of issue of certificate)

.....
(Date of issue) (dd/mm/yyyy)

(Signature of authorised official issuing the certificate)

(Seal or stamp of the authority, as appropriate)

*(Delete as appropriate)

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..... Place

..... Date (dd/mm/yyyy)

(Seal or stamp of the authority, as appropriate)

Annual survey Signed

.....

(Signature of duly authorised official)

..... Place

..... Date (dd/mm/yyyy)

(Seal or stamp of the authority, as appropriate)

THIRTEENTH SCHEDULE (A)

(Sections 83 (2) and 88 (2))

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 & 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 form), 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 Organisation (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 regulation 14 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.

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5. The purpose of the Manual is to identify the arrangements and equipment required to enable compliance with Annex II and to identify for that 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 procedure contained in the 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.

Index of Sections

1. Main features of MARPOL 73/78, Annex II	262
2. Description of the ship's equipment and arrangements	263
3. Cargo unloading procedures and tank stripping	265
4. Procedures relating to the cleaning of cargo tanks, the discharge Of residues, ballasting and deballasting	266
5. Information and procedures	268.

* Include only the Certificate issued to the particular ship, i.e. The International Pollution 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.

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 may a tank be approved for the carriage of a category X, Y or Z substance.

- 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 positions 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 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:

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. positions 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.

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Line or schematic drawings and tables or charts shall be provided 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 drawing 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 section 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 should be obtained from the shipping document.

For substances allowed to be carried, reference is made to the relevant Certificate.

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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)

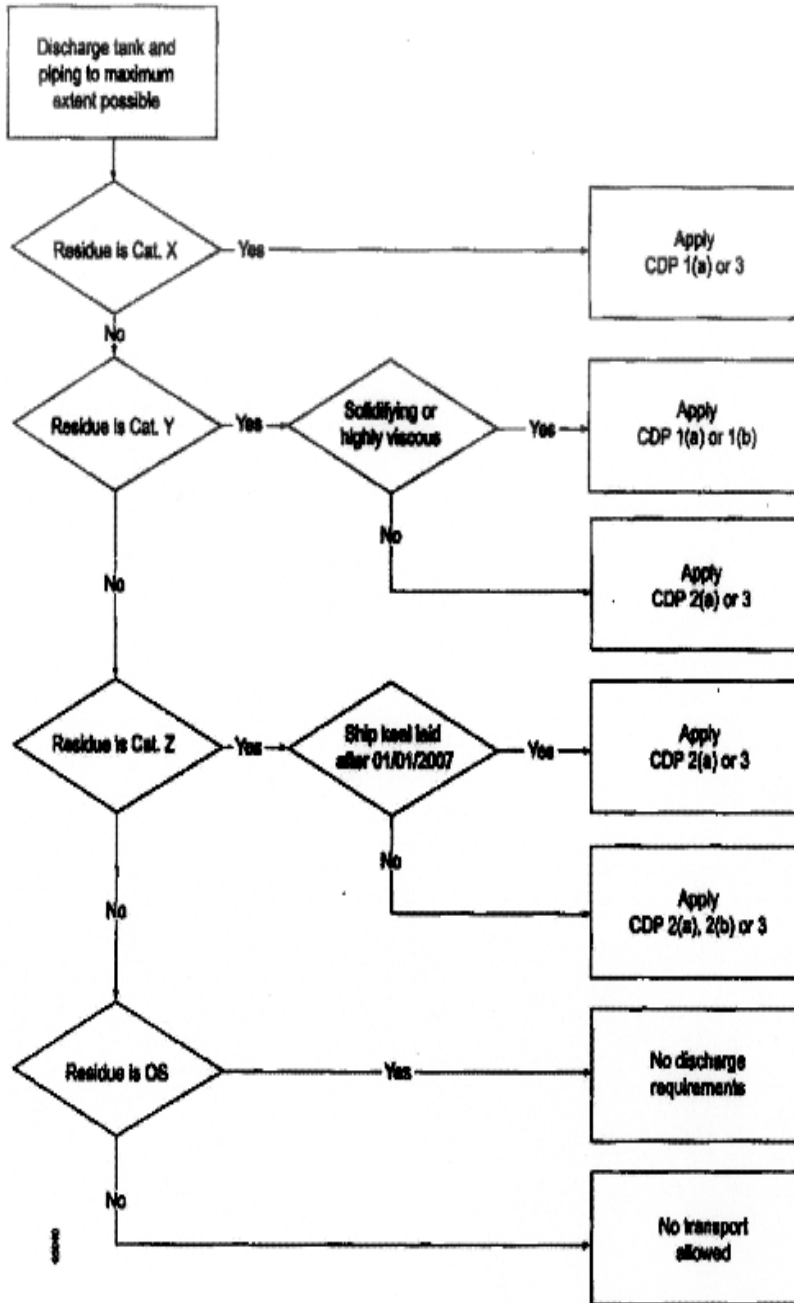
* Tank numbers should be identical to those in the ship's certificate of fitness.

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.

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Ship details	Stripping requirements (in litres)		
New ships keel laid after 1 January, 2007	Category X	Category Y	Category Z
	75	75	75
IBC ships until 1 January, 2007	100 + 50Tolerance	100 + 50Tolerance	300 + 50Tolerance
BCH ships	300 + 50 Tolerance	300 + 50 Tolerance	900 + 50 Tolerance
Other ships keel laid before 1 January, 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	Ship tank and piping to maximum extent at least in compliance with the procedure in section 3 of the Manual	X	X	X	X	X
2	Apply prewash in accordance with addendum B of the Manual and discharge residue to reception facility	X	X			

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No.	Operation	Procedure number				
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 wash 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 the 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					
	4. Using underwater discharge (not exceeding permissible discharge rate)	X		X		
8	Conditions for discharge of ballast					
	1. distance from land > 12 nautical		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

The addendum in 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 position 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

This addendum to the Manual shall contain additional information and operational instructions required or accepted by the Administration.

THIRTEENTH SCHEDULE 'B'

(Section 98(10))

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.

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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 backpressure 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.

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- 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."

Annex II: Regulations for the Control of Pollution by MLS
Appendix 5: Assessment of residue quantities

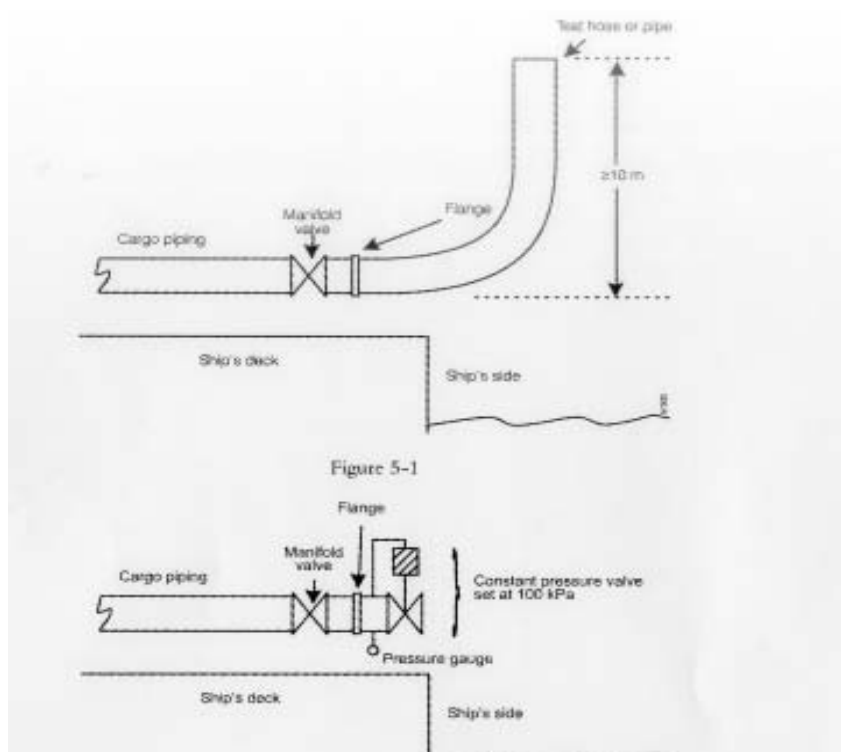


Figure 5-2

The above figures illustrate test arrangements that would provide a backpressure of not less than 100 kPa at the cargo tank's unloading manifold.

THIRTEENTH SCHEDULE “C”

(Sections 89 (3)(a), 90(4), 92(3)(b) and 98(6)(b))

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 mPas 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 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 orientation 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 continued 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	Non-solidifying Substances
Category X	1	2
Category X	1 2	1

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- B** For ships built on or after 1 July 1994 and recommendatory for ships build 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 of 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 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.

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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 a 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 cubic metres

r = the residual quantity per tank in cubic metres. The value of r shall be the value demonstrated in the actual stripping efficiency test,

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but shall not be taken lower than 0.100 m³ for a tank volume of 500 m³ and above and 0.040 m³ for a tank volume of 100 m³ and below. For tank sizes between 100 m³ and below. For tank sizes between 100 m³ and 500 m³ 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 m³.

V = tank volume in cubic metres

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
0.10	2.5	2.0	5.4
0.30	5.9	6.8	12.2
0.90	14.3	16.1	27.7

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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.

THIRTEENTH SCHEDULE “D”
(Section 86 (2), 87(d))

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.

Annex II: Regulations for the Control of Pollution by NLS
Appendix 7: Ventilation procedures

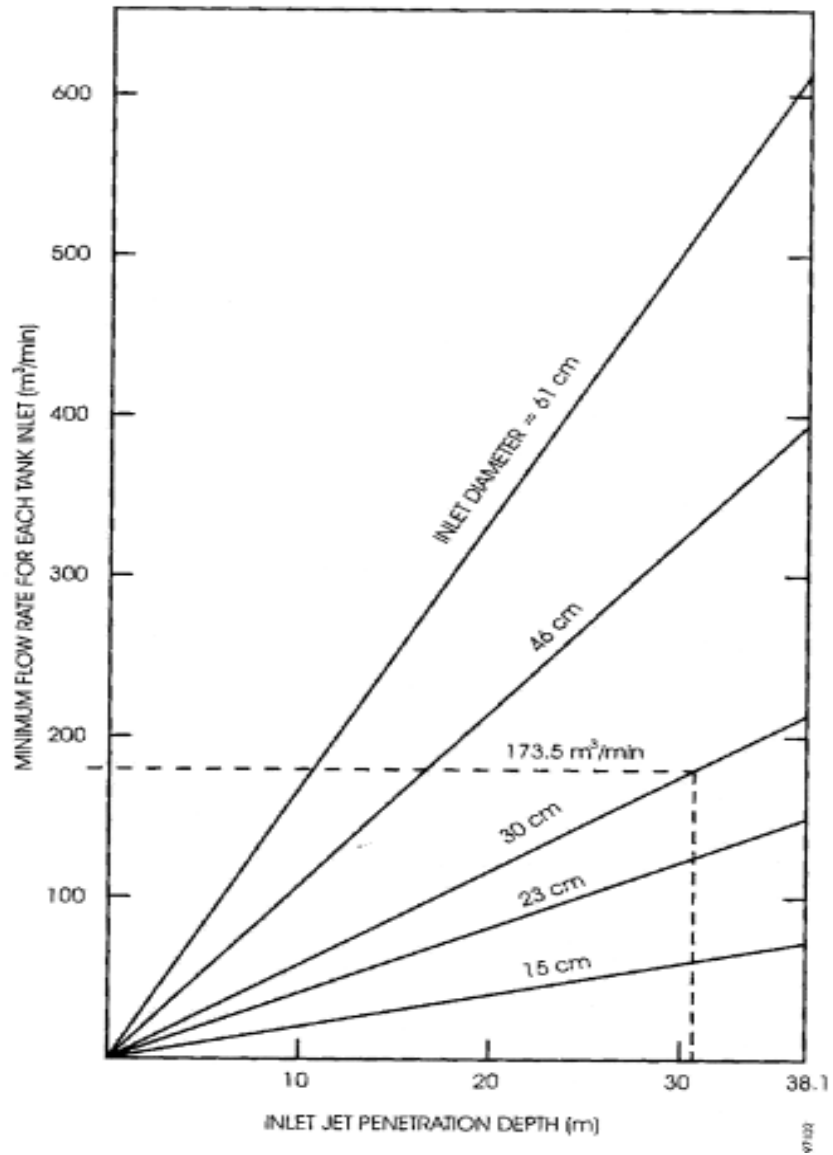


Figure 7-1 Minimum flow rate as a function of jet penetration depth. Jet penetration depth shall be compared against tank height.

FOURTEENTH SCHEDULE “A”

(Section 117 (2) and 120(3))

Appendix to Annex III

**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*);
- 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
- highly toxic to aquatic life, defined by a $LC_{50}/96$ hour⁺ less than 1 ppm (Hazard Rating “4” column B*).

* Refer 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 organisation by means of BLG 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. Also referred to as “96 h LC_{50} ”, LC_{50} is often specified in milligrams per litre (mg/l) or parts per million (ppm).

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FOURTEENTH SCHEDULE “B”

(Section 133)

FORM OF ISPP 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, as amended, by resolution MEPC 132(53), (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 organisation authorised 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.....

* Delete as appropriate.

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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 the 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 manufacturerThe sewage treatment plan 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 tankm³
 - Total capacity of the holding tank
 - Location
 - 1.4. A pipeline for the discharge of sewage to a reception facility fitted with a standard connection.
 2. 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 materials 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 subject to

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surveys in accordance with regulation 4 of Annex IV of the Convention.

Completion date of survey on which the Certificate is based

dd/mm/yyyy/

Issued at

(Place of issue of Certificate)

.....dd/mm/yyyy.....

(date of issue)

.....
(signature of authorised official
issuing the Certificate)

Seal or stamp of the authority, as appropriate

*Delete as appropriate

FIFTEENTH SCHEDULE

(Section 139)

STANDARD DIMENSIONS OF FLANGES FOR DISCHARGE CONNECTIONS

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

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

SIXTEENTH SCHEDULE

(Section 159 (2))

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 (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:

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

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

4 Entries in the Garbage Record Book

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

- (a) When garbage is discharged into the sea:
 - (i) Date and time of discharge
 - (ii) Position of the ship (latitude and longitude) Note, for cargo residue discharges include discharge start and stop positions
 - (iii) Category of garbage discharged
 - (iv) Estimated amount discharged for each category in cubic metres
 - (v) Signature of the officer in charge of the operation
- (b) When garbage is discharged to reception facilities ashore or to other ships:
 - (i) Date and time of discharge
 - (ii) Port or facility, or name of ship
 - (iii) Category of garbage discharged
 - (iv) Estimated amount discharged for each category in cubic metres
 - (v) Signature of officer in charge of the operation
- (c) When garbage is incinerated:
 - (i) Date and time of start and stop of incineration
 - (ii) Position of the ship (latitude and longitude)
 - (iii) Estimated amount incinerated in cubic metres
 - (iv) Signature of the officer in charge of the operation.

- (d) Accidental or other exceptional discharges of garbage
 - (i) Time of occurrence
 - (ii) Port or position of the ship at time of occurrence
 - (iii) Estimated amount and category of garbage
 - (iv) Circumstances of disposal, escape or loss, the reason 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 on board should be estimated in cubic metres, if possible separated according to category. The Garbage Record Book contains many references to estimated amount of garbage. It is recognised 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.

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RECORD OF GARBAGE DISCHARGES

Ship's name Distinctive no. or lettersIMO No.

Garbage categories:

1. Plastic
2. Floating dunnage, lining, or packing materials.
3. Ground paper, products, rags, glass, metal, bottles, crockery, etc.
4. Cargo residues paper products, rags, 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 CATEGORISED. GARBAGE OTHER THAN CATEGORY 1 DISCHARGED TO RECEPTION FACILITIES NEED ONLY BE LISTED AS A TOTAL ESTIMATED AMOUNT. DISCHARGES OF CARGO RESIDUES START & STOP POSITIONS TO BE RECORDED.

Date Time	Position of the ship	Estimated amount discharged into sea (m ³)					Estimated amount dis- charged to recep- tion facilities or to other ship (m ³)	E s t i - m a t e d a m o u n t i n c i n e r - a t e d (m ³)	Certifica- tion/ Signa- ture
		Cat. 2	Cat. 3	Cat. 4	Cat. 5	Cat. 6			

Master's signature:..... Date:

SEVENTEENTH SCHEDULE

(Section 174)

**FORM OF INTERNATIONAL AIR POLLUTION
PREVENTION CERTIFICATE**

**INTERNATIONAL AIR POLLUTION PREVENTION
CERTIFICATE**

Issued under the provisions of the Protocol of 1997 to amend the International Convention for the Prevention of Pollution from Ships, 1973, as modified of the Protocol of 1978 relating thereto and as amended by resolution MEPC 132(53) (hereinafter referred to as “the Convention”) under the authority of the Government of:

.....

(full designation of the country)

by

Particulars of ship

Nature of ship

Distinctive number or letters

Port of registry

Gross tonnage

IMO number

Tanker

Ship other than tanker

THIS IS TO CERTIFY

1. That the ship has been surveyed in accordance with regulation 6 of Annex VI of the Convention; and
2. That the survey shows that the equipment, systems, fittings, arrangements and materials fully comply with the applicable requirements of Annex VI of the Convention.

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Completion date of survey on which this Certificate is based
.....dd/mm/yyyy.....

This Certificate is valid until subject to surveys in
accordance with regulation 6 of Annex VI of the Convention.

Issued at
(Place of issue of certificate)

.....
(Signature of duly authorised official issuing the certificate)

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

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ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that at a survey required by regulation 5 of Annex VI of the Convention the ship was found to comply with the relevant provisions of the Convention:

Annual survey: **Signed**

(Signature of duly authorised official)

Place

Date :.....

(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate* survey: Signed

.....

(Signature of duly authorised official)

Place :

Date:

(Seal or stamp of the authority, as appropriate)

Annual*/Intermediate* survey: Signed :.....

(Signature of duly authorised official)

Place

Date

(Seal or stamp of the authority, as appropriate)

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Annual*survey: Signed
(Signature of duly authorised official)

Place :

Date:

(Seal or stamp of the authority, as appropriate)

* Delete as appropriate.

**SUPPLEMENT TO
INTERNATIONAL AIR POLLUTION PREVENTION
CERTIFICATE
(IAPP CERTIFICATE)**

RECORD OF CONSTRUCTION AND EQUIPMENT

In respect of the provisions of Annex VI 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 Record shall be permanently attached to the IAPP Certificate. The IAPP Certificate shall be available on board the ship at all times.
2.	The 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.
3.	Entries in boxes shall be made by inserting either a cross (X) or a (-) for the answers “no” and “not applicable” or a (-) for the answers “no” and “not applicable, as appropriate.
4.	Unless otherwise stated, regulations mentioned in this Record refer to regulations of Annex VI of the Convention and resolutions or circulars refer to those adopted by the International Maritime Organization.

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1. Particulars of ship

1.1 Name of ship

.....

1.2 Distinctive number of letters

1.3 IMO number

1.4 Port of registry

1.5 Gross tonnage

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

.....

1.7 Date of commencement of major engine conversion (if applicable) (regulation 13)

.....

2. Control of emissions from ships

2.1. Ozone-depleting substances (regulation 12)

2.1.1 The following fire-extinguishing systems and equipment containing halons may continue in service:

System equipment	Location on Board

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2.1.2 The following systems and equipment containing CFCs may continue in service:

System equipment	Location on Board

2.1.3 The following systems containing hydro-chlorofluorocarbons (HCFCs) installed before 1 January 2020 may continue in service:

System equipment	Location on Board

2.2 Nitrogen oxides (NO_x) (regulation 13).....

2.2.1 The following diesel engines with power output greater than 130 kw, and installed on a ship constructed on or after 1 January, 2000, comply with the emission standards of regulation 13 (3) (a) in accordance dwith the NO_x Technical Code:

Manufacturer and model	Serial number	Use	Power output (kW)	Rated speed (rpm)

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2.2.2 The following diesel engines with power output greater than 130kW, and which underwent major conversion per regulation 13 (2) on or after 1 January, 2000, comply with the emission standards of regulation 13 (3) (a) in accordance with the No₂ Technical Code:

Manufacturer and model	Serial number	Use	Power output (kW)	Rated speed (rpm)

2.2.3 The following diesel engines with a power output greater than 130kW, and installed on a ship constructed on or after 1 January 2000 or with a power output greater than 130 kW and which underwent major conversion per regulation 13 (2) on or after 1 January, 2000, are fitted with an exhaust gas cleaning system or other equivalent methods in accordance with regulation 13 (3) and the No₂ Technical Code:

Manufacturer and model	Serial number	Use	Power output (kW)	Rated speed (rpm)

2.2.4 The following diesel engines from 2.2.1, 2.2.2 and 2.2.3 above are fitted with NO emission monitoring and recording devices in accordance with the No₂ Technical Code:

2.3 *Sulphur oxides* (SO_x) (regulation 14).

2.3.1 When the ship operates within an SO_x emission control area specified in regulation 14 (3) the ship uses:

1. fuel oil with a sulphur content that does not exceed 1.5% m/m as documented by bunker delivery notes; or

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2. an approval exhaust gas cleaning system to reduce SO_x emissions below 6.0 g SO_x/kW h: or
3. other approved technology to reduce SO_x emissions below 6.0 g SO_x/kW h

2.4 Volatile organic components (VOGs) (regulation 15).

2.4.1 The tanker has a vapour collection system installed and approved in accordance with MSC/Cire. 585.

2.5 The ship has an incinerator:

1. which complies with resolution MEPC 76 (40) as amended
2. installed before 1 January, 2000 which does not comply with resolution MEPC 76 (40) as amended

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 authorised official Issuing the Record)

(Seal or stamp of the authority, as appropriate)

EIGHTEENTH SCHEDULE

(Section 188 (2))

**ANNEX TO THE INTERNATIONAL CONVENTION ON OIL
POLLUTION PREPAREDNESS, RESPONSE AND
CO-OPERATION, 1990**

REIMBURSEMENT OF COSTS OF ASSISTANCE

1. (a) Unless an agreement concerning the financial arrangements governing actions of Parties to deal with oil pollution incidents has been concluded on a bilateral or multilateral basis prior to the oil pollution incident, Parties shall bear the costs of their respective actions in dealing with pollution in accordance with subparagraph (i) or subparagraph (ii).
 - (i) If the action was taken by one Party at the express request of another Party, the requesting Party shall reimburse to the assisting Party the cost of its action. The requesting Party may cancel its request at any time, but in that case it shall bear the costs already incurred or committed by the assisting Party.
 - (ii) If the action was taken by a Party on its own initiative, this Party shall bear the costs of its action.
- (b) The principles laid down in subparagraph (a) shall apply unless the Parties concerned otherwise agree in any individual case.
- (2) Unless otherwise agreed, the costs of action taken by a Party at the request of another Party shall be fairly calculated according to the law and current practice of the assisting Party concerning the reimbursement of such costs.
- (3) The Party requesting assistance and the assisting Party shall, where appropriate, co-operate in concluding any action in response to a compensation claim. To that end, they shall give due consideration to existing legal regimes. Where the action thus concluded does not permit full compensation for expenses incurred in the assistance operation, the Party requesting assistance may ask the assisting party to waive reimbursement of the expenses exceeding the sums

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compensated or to reduce the costs which have been calculated in accordance with paragraph (2). It may also request a postponement of the reimbursement of such costs. In considering such a request, assisting Parties shall give due consideration to the needs of the developing countries.

- (4) The provisions of this Convention shall not be interpreted as in any way prejudicing the rights of Parties to recover from third parties the costs of actions to deal with pollution or the threat of pollution under other applicable provisions and rules of national and international law. Special attention shall be paid to the 1969 International Convention on Civil Liability for Oil Pollution Damage and the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage or any subsequent amendment to those Conventions.

NINETEENTH SCHEDULE

(Section 217 (1))

Overall Limit on Liability of Fund

PART I

Permanent Provision

Article 4 - paragraphs 4 and 5

4. (a) Except as otherwise provided in sub-paragraphs (b) and (c) of this paragraph, the aggregate amount of compensation payable by the Fund under this Article shall in respect of any one incident be limited, so that the total sum of that amount and the amount of compensation actually paid under the Liability Convention for pollution damage within the scope of application of this Convention as defined in Article 3 shall not exceed 135 million units of account.
- (b) Except as otherwise provided in sub-paragraph (c), the aggregate amount of compensation payable by the Fund under this Article for pollution damage resulting from a natural phenomenon of an exceptional, inevitable and irresistible character shall not exceed 135 units of account.
- (c) The maximum amount of compensation referred to in sub-paragraph (a) and (c) shall be 200 million units of account with respect to any incident occurring during any period when there are three Parties to this Convention in respect of which the combined relevant quantity of contributing oil received by persons in the territories of such parties, during the preceding calendar year, equalled or exceeded 600 million tons.
- (d) Interest accrued on a fund constituted in accordance with Article V, paragraph 3, of the Liability Convention, if any, shall not be taken into account for the computation of the maximum compensation payable by the Fund under this Article.

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- (e) The amounts mentioned in this Article shall be converted into national currency on the basis of the value of that currency by reference to the Special Drawing Right on the date of the decision of the Assembly of the Fund as to the first date of payment of compensation.
5. Where the amount of established claims against the Fund exceeds the aggregate amount of compensation payable under paragraph 4, the amount available shall be distributed in such a manner that the proportion between any established claim and the amount of compensation actually recovered by the claimant under this Convention shall be the same for all claimants.

PART II

Transitional Provision

Article 4—paragraphs 4, 5 and 6

4. (a) Except as otherwise provided in sub-paragraph (b) of this paragraph, the aggregate amount of compensation payable by the Fund under this Article shall in respect of any one incident be limited, so that the total sum of that amount and the amount of compensation actually paid under the Liability Convention for pollution damage caused in the territory of the Contracting States, including any sums in respect of which the Fund is under an obligation to indemnify the owner pursuant to Article 5, paragraph 1, of this Convention, shall not exceed 30 million special drawing rights.
- (b) The aggregate amount of compensation payable by the Fund under this Article for pollution damage resulting from a natural phenomenon of an exceptional, inevitable and irresistible character shall not exceed 30 million special drawing rights.

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5. Where the amount of established claims against the Fund exceeds the aggregate amount of compensation payable under paragraph 4, the amount available shall be distributed in such manner that the proportion between any established claim and the amount of compensation actually recovered by the claimant under the Liability Convention and this Convention shall be the same for all claimants.
6. The Assembly of the Fund (hereinafter referred to as “the Assembly”) may, having regard to the experience of incidents which have occurred and in particular the amount of damage resulting therefrom and to changes in the monetary values, decide that the amount of 30 million special drawing rights referred to in paragraph 4, subparagraph (a) and (b), shall be changed; provided, however, that this amount shall in no case exceed 60 million special drawing rights or be lower than 30 million special drawing rights. The changed amount shall apply to incidents which occur after the date of the decision effecting the change.

TWENTIETH SCHEDULE

(Section 205 (3) (e))

**FORM OF CERTIFICATE OF INSURANCE REGARDING
CARRIAGE OF HNS**

**Certificate of Insurance or Other Financial Security in respect of
Liability for Damage Caused by Hazardous and Noxious Substances
(HNS)**

Issued in accordance with the provisions of article 12 of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996.

Name of ship	Distinctive number or letters	IMO ship identification number	Port of registry	Name and full address of the principal place of business of the owner

This is to certify that there is in force in respect of the above-named ship a policy of insurance or other financial security satisfying the requirements of article 12 of the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 1996.

Type of security

Duration of security

Name and address of the insurer(s) and/or guarantor(s)

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Name:

Address:

This certificate is valid until

Issued or certified by the Government of

.....
(Full designation of the State)

At
(Place)

On.....
(Date)

.....
(Signature and title of issuing or certifying official)

Explanatory notes:

1. If desired, the designation of the State may include a reference to the competent public authority of the country where the certificate is issued.
2. If the total amount of security has been furnished by more than one source, the amount of each of them should be indicated.
3. If security is furnished in several forms, these should be enumerated.
4. The entry "Duration of security" must stipulate the date on which such security takes effect.
5. The entry "Address" of the insurer(s) and/or guarantor(s) must indicate the principal place of business of the insurer(s) and/or guarantor(s). If appropriate, the place of business where the insurance or other security is established shall be indicated.

TWENTY-FIRST SCHEDULE

(Section 41)

Arbitration

(in accordance with article 10 of the Convention)

Article I

Arbitration procedure, unless the Parties to the dispute decide otherwise, shall be in accordance with the rules set out in this Protocol.

Article II

- (1) An Arbitration Tribunal shall be established upon the request of one Party to the Convention addressed to another in application of article 10 of the present Convention. The request for arbitration shall consist of a statement of the case together with any supporting documents.
- (2) The requesting Party shall inform the Secretary-General of the Organisation of the fact that it has applied for the establishment of a Tribunal, of the names of the Parties to the dispute, and of the articles of the Convention or Regulations over which there is in its opinion disagreement concerning their interpretation or application. The Secretary-General shall transmit this information to all Parties.

Article III

The Tribunal shall consist of three members: one Arbitrator nominated by each Party to the dispute and a third Arbitrator who shall be nominated by agreement between the two first named, and shall act as its Chairman.

Article IV

- (1) If, at the end of a period of 60 days from the nomination of the second Arbitrator, the Chairman of the Tribunal shall not have been nominated, the Secretary-General of the Organisation upon request of either Party shall within a further period of 60 days proceed to such nomination, selecting him from a list of qualified persons previously drawn up by the Council of the Organisation.

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- (2) If, within a period of 60 days from the date of the receipt of the request, one of the Parties shall not have nominated the member of the Tribunal for whose designation it is responsible, the other Party may directly inform the Secretary-General of the Organisation who shall nominate the Chairman of the Tribunal within a period of 60 days, selecting him from the list prescribed in paragraph (1) of the present article.
- (3) The Chairman of the Tribunal shall, upon nomination, request the Party which has not provided an Arbitrator, to do so in the same manner and under the same conditions. If the Party does not make the required nomination, the Chairman of the Tribunal shall request the Secretary-General of the Organisation to make the nomination in the form and conditions prescribed in the preceding paragraph.
- (4) The Chairman of the Tribunal, if nominated under the provisions of the present article, shall not be or have been a national of one of the Parties concerned, except with the consent of the other Party.
- (5) In the case of the decease or default of an Arbitrator for whose nomination one of the Parties is responsible, the said Party shall nominate a replacement within a period of 60 days from the date of decease or default. Should the said Party not make the nomination, the arbitration shall proceed under the remaining Arbitrators. In case of the decease or default of the Chairman of the Tribunal, a replacement shall be nominated in accordance with the provisions of article III above, or in the absence of agreement between the members of the Tribunal within a period of 60 days of the decease or default according to the provisions of the present article.

Article V

The Tribunal may hear and determine counter-claims arising directly out of the subject matter of the dispute.

Article VI

Each Party shall be responsible for the remuneration of its Arbitrator and connected costs and for the costs entailed by the preparation of its own case. The remuneration of the Chairman of the Tribunal and of all general expenses incurred by the Arbitration shall be borne equally by the Parties. The Tribunal shall keep a record of all its expenses and shall furnish a final statement thereof.

Article VII

Any Party to the Convention which has an interest of a legal nature and which may be affected by the decision in the case may, after giving written notice to the Parties which have originally initiated the procedure, join in the arbitration procedure with the consent of the Tribunal.

Article VIII

Any Arbitration Tribunal established under the provisions of the present Protocol shall decide its own rules of procedure.

Article IX

- (1) Decisions of the Tribunal both as to its procedure and its place of meeting and as to any question laid before it, shall be taken by majority votes of its members, the absence or abstention of one of the members of the Tribunal for whose nomination the Parties were responsible, shall not constitute an impediment to the Tribunal reaching a decision. In cases of equal voting, the vote of the Chairman shall be decisive.
- (2) The Parties shall facilitate the work of the Tribunal and in particular in accordance with their legislation, and using all means at their disposal:

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- (a) provide the Tribunal with the necessary documents and information;
 - (b) enable the Tribunal to enter their territory, to hear witnesses or experts, and to visit the scene.
- (3) Absence of default of one Party shall not constitute an impediment to the procedure.

Article X

- (1) The Tribunal shall render its award within a period of five months from the time it is established unless it decides, in the case of necessity, to extend the time limit for a further period not exceeding three months. The award of the Tribunal shall be accompanied by a statement of reasons. It shall be final and without appeal and shall be communicated to the Secretary-General of the Organisation. The Parties shall immediately comply with the award.
- (2) Any controversy which may arise between the Parties as regards interpretation or execution of the award may be submitted by either Party for judgment to the Tribunal which made the award, or, if it is not available to another Tribunal constituted for this purpose, in the same manner as the original Tribunal.

Date of *Gazette* notification: 21st October, 2015.

