



IMCO

INTERNATIONAL CONFERENCE ON
MARINE POLLUTION, 1973
Agenda item 7

CONSIDERATION OF A DRAFT INTERNATIONAL CONVENTION
FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973

Comments and proposals of Governments on a
draft text of the Convention

Submitted by the Government of Canada

Further to MP/CONF/8, attached hereto are comments of the Government of Canada concerning the Annexes to the draft International Convention for the Prevention of Pollution from Ships, 1973.

DRAFT CONVENTION FOR THE
PREVENTION OF POLLUTION FROM SHIPS, 1973

Canada's Proposal for Amendments to Annex I

Regulation 1(4)

The following should be inserted at the end of the paragraph:

"..... and a chemical tanker when carrying a cargo or part cargo of oil in bulk."

Explanatory Note

This change is to bring chemical tankers within the scope of Annex I as oil tankers at such time as these ships carry oil. Similar to the provision in Regulation 1(1) of Annex II.

Regulation 1(8)

Delete definition of "International voyage".

Explanatory Note

Consequential to the proposed amendment of Regulation 5(1) below.

Regulation 1(16)

In third line of paragraph, delete word "tanker" and insert "ship".

Explanatory Note

This change makes the definition of "clean ballast" general in application.

Regulation 2(2)

Delete existing paragraph and substitute the following:

"In ships other than oil tankers, which are fitted with cargo spaces capable of carrying oil in bulk of [200] cubic metres and above, the requirements of Chapter I and Regulations 9(1)(a), 11, 12, 15, 18 and 24(1) and (4) of this Annex shall, in addition to the other requirements of this Annex for such ships, apply to those spaces."

Explanatory Note

This proposal is solely for the purpose of clarifying the intent of the existing text as applicable to ships other than tankers. Submission of this proposal is not to be taken as indicating support for the intent of the paragraph.

Regulation 5(1)

In third line of the paragraph delete the words "which are engaged in international voyages".

Explanatory Note

Regulation 4 requires that all ships of the specified gross tonnages and above be surveyed and inspected at specified intervals, whereas Regulation 5 only requires certification if ships are engaged on international voyages. Some form of certification will be required by Administrations for recording, periodic survey and inspection purposes. In this respect the issue of an International Oil Pollution Prevention Certificate (1973) to all ships to which Regulation 4 applies would serve such administrative purposes irrespective of the type of voyage made by these ships as well as for the purposes specified in Article 5 of the Draft Convention. The adoption of such a procedure of certification would not then require that "International voyage" be defined as these ships would hold certificates at such time as they arrive in the ports and off-shore terminals of another Contracting State.

Regulation 9(1)(a)(vi) and (vii)

Delete sub-paragraphs and substitute the following:

- "(vi) after [2] years from the date of entry into force of the present Convention, the tanker has in operation an oil discharge monitoring and control system and a slop tank arrangement as required by Regulation 15 of this Annex; and
- (vii) the discharge of oil or oily mixture from machinery space bilges of the tanker, excluding cargo pump room bilges, shall be governed by sub-paragraph (b) of this paragraph;"

Explanatory Note

These changes clarify the text and includes the [2] year period referred to in Regulation 11(3) of the Draft Convention.

Regulation 10(b)

Delete paragraph and substitute the following:

"(b) the escape of oil or an oily mixture resulting from damage to a ship or its equipment if all reasonable precautions have been taken

- (i) to avoid the damage to the ship or its equipment, and
- (ii) to prevent or minimize the escape; or"

Explanatory Note

It is considered that reasonable precautions must be observed at all times to avoid accidental escape of oil. The proposed amendment emphasises the need for continuing awareness of this responsibility.

Regulation 11

1. Delete existing paragraphs and substitute the following:

"(1) Subject to the provisions of Regulation 12 of this Annex, every oil tanker of [150] tons gross tonnage and above shall, in order to comply with the discharge criteria specified in Regulation 9 of this Annex, be capable of operating under both of the following methods;

- (a) retention of oil on board, (Load-on-Top); and
- (b) retention of oil on board with subsequent disposal to a reception facility specified in Regulation 20 of this Annex;

and to this end shall comply with the requirements of Regulation 15 of this Annex.

(2) The Administration shall ensure that oil tankers of less than [150] tons gross tonnage shall, as far as is reasonable and practicable, comply with the provisions of paragraph (1) of this Regulation."

2. Transfer paragraph (2) of existing text to Regulation 13 as first paragraph.

Explanatory Note

Regulation 11 has been redrafted for clarity, so that all provisions for segregated ballast tanks would be contained in Regulation 13 as redrafted; and Regulation 11 would further contain provisions regarding the compliance of smaller ships in keeping with the expressed intent of Regulation 4(2) of this Annex. Paragraph (3) of original text of Regulation 11 would not be required as a consequence of the earlier proposed changes to Regulation 9(1)(a)(vi) and (vii). This proposal and consequential changes are solely for the purpose of clarifying the intent of the existing text and are not to be taken as indicating support for the intent of the regulation as originally drafted.

Regulation 13(1)

Delete existing paragraph and substitute original text of Regulation 11(2) as Draft Convention.

Explanatory Note

Consequential to the proposed amendment of Regulation 11 as shown above.

Regulation 13(4)

In first and second lines of paragraph delete words "Regulation 11(2) of this Annex" and substitute: "paragraph (1) of this Regulation". Also in second and third lines of paragraph delete words "referred to in Regulation 11(1)(a) of this Annex".

Explanatory Note

Consequential to the proposed amendments of Regulation 11 and Regulation 13(1) above.

Regulation 15

Delete existing Regulation and substitute the following:

"Regulation 15Retention of Oil on Board Oil Tankers

- (1) In order to comply with the provisions of Regulation 11(1) of this Annex, oil tankers shall be provided with adequate means for cleaning the cargo tanks and with means for the transference of the dirty oil ballast residue and washings from the cargo tanks into a slop tank or reception tank approved by the Administration and in this system;
- (a) arrangements shall be provided to transfer the oily waste into a slop tank or combination of slop tanks in such a way that the oil content of any effluent is such as to comply with the provisions of Regulation 9 of this Annex;
- (b) arrangements of the slop tank or combination of slop tanks shall have a capacity necessary to retain the slops generated by the tank washings and dirty oil ballast residue but the total shall be not less than [3] per cent of the oil carrying capacity of the tanker, except that where arrangements involving the use of additional water, such as eductors, are not fitted the Administration may accept [2] per cent. Oil tankers of [100,000] tons deadweight and over shall be provided with at least two slop tanks;

- (c) slop tanks shall be so designed, particularly in respect of the position of inlets, outlets, baffles or weirs where fitted, so as to avoid excessive turbulence and entrainment of oil or emulsion with the water;
 - (d) the tanker shall be fitted with an [automatic] oil content monitoring and control system approved by the Administration to check the quality of any effluent discharged to the sea in the "once through system" or decanted from any cargo tank, slop tank or reception tank in which ballast water or tank washings are allowed to settle either when the recirculatory system is used or when the discharge of residue to a reception facility specified in Regulation 20 of this Annex is intended. [The meter shall be fitted with a recording device to provide a permanent record of the oil content of the discharge];
 - (e) an efficient and effective oil/water interface detector approved by the Administration shall be provided for a rapid and accurate determination of the oil/water interface in tanks where the separation of oil and water is effected and from which it is intended to discharge the water direct to the sea; and
 - (f) the operation of this system shall be in accordance with an operational manual approved by the Administration and intended to ensure that at no time shall oil be discharged except in compliance with the conditions specified in Regulation 9 of this Annex.
- (2) Where the arrangements as required under paragraph (1) of this Regulation are operated in order to retain all contaminated washings and dirty ballast residue on board, with subsequent disposal to a reception facility specified in Regulation 20 of this Annex, the total quantity of oil and water returned to a storage tank or tanks shall be recorded in the Oil Record Book. This total quantity shall be discharged to a reception facility unless adequate provisions are made to ensure that any settled water which is allowed to be discharged to the sea is effectively monitored to ensure that the provisions of Regulation 9 of this Annex are complied with".

Explanatory Note

This proposal is solely for the purpose of clarifying the text particularly with reference to Regulation 11 as redrafted. It is not to be taken as indicating support for the intent of regulation as originally drafted.

Regulation 16(3)

Delete existing paragraph and substitute the following:

"The Administration shall ensure that ships of less than [400] tons gross tonnage are equipped with installations, as far as is reasonable and practicable, in order to comply with the discharge criteria specified in Regulation 9(1)(b) of this Annex, or in order to retain waste oil on board for disposal to a reception facility specified in Regulation 20 of this Annex".

Explanatory Note

This change is to clarify the text.

DRAFT CONVENTION FOR THE
PREVENTION OF POLLUTION FROM SHIPS, 1973
Canadian Proposal for Amendments to Annex II

Regulation 1(5)

Include in this definition the word "liquid" as follows, and in subsequent regulations as appropriate:

"(5) noxious liquid substance" means a harmful liquid substance other than oil, sewage or garbage as defined in Annexes I, IV and V respectively."

Explanatory Note

The wording should conform to the title of Annex II wherever possible.

Regulation 3(1)

Reword the paragraph preceding subparagraph (a) as follows:

"For the purpose of the Regulations of this Annex, except Regulation 11, noxious liquid substances shall be divided into three categories using the following guidelines and those given in Appendix I to this Annex:"

Explanatory Note

Regulations 3(3) and 4(1) refer back to Regulation 3(1) and suggest that subparagraphs (a)(b) and (c) of Regulation 3(1) form part of the guidelines used in the categorization of the substances.

Regulation 4

It is proposed that paragraph (2) should be deleted and replaced by the following paragraphs:

"(2) Subject to the provisions of Regulation 6 of this Annex, the discharge into the sea of substances listed in Appendix III to this Annex shall be prohibited. However, bilge or ballast water, or other residues or mixtures containing those substances may be discharged into the sea provided that such mixtures have been satisfactorily diluted.

NOTE: The purpose of the underlining of words and phrases is to indicate the proposed changes in text.

(3) Regulations 10 and 11 of this Annex do not apply to ships that carry the substances listed in Appendix III to this Annex but non-compliance with those Regulations shall not derogate from the application to such ships of the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, in so far as that Code is applicable."

Explanatory Note

The substances listed in Appendix III were evaluated and so listed on the basis that they would only be discharged into the sea after adequate dilution had taken place so as to render such substances "harmless" to the marine environment. It is to be noted that almost 60 percent of the substances listed in Appendix III have a hazard profile rating in the TLM range between 100 and 1,000 p.p.m. and it is considered that the proposed amendment is necessary to provide for stricter control over the discharge into the sea of those substances.

The introduction of the proposed paragraph (3) will require that the handling of cargoes that are substances as listed in Appendix III shall be recorded in the Cargo Record Book. Also, this proposed paragraph gives clarification that although construction requirements do not apply with respect to pollution prevention some of these substances are "dangerous chemicals" and as such fall within the scope of the Bulk Chemical Code.

Regulation 5(2)(b)

It is proposed that subparagraph (b) should be reworded in line with the Canadian proposal for the introduction of Guidelines on Procedures for Cleaning Tanks that have Contained Category B or C Substances and from which the reference to the concentration of the substance would be changed to read "the concentration of the substance immediately before discharge into the sea does not exceed 1,000 parts per million".

Regulation 5(3)(b)

It is proposed that subparagraph (b) should be reworded in line with the Canadian proposal for the introduction of Guidelines on Procedures for Cleaning Tanks that have Contained Category B or C Substances and from which the reference to the concentration of the substance would be changed to read "the concentration of the substance immediately before discharge into the sea does not exceed 10,000 parts per million".

Regulation 5(4)

It is proposed that the present wording be deleted and replaced by the following:

"(4) Where ventilation procedures are used to remove cargo residues from a tank such procedures shall be approved by the Administration and shall be to the satisfaction of the Contracting Government of the State where those procedures are used. If subsequent washing of the tank is necessary the discharge into the sea of the resulting tank washings shall be in accordance with paragraph (1), (2) or (3) of this Regulation, whichever is applicable."

Explanatory Note

It is suggested that ventilation procedures shall be to the satisfaction of the Government of the receiving State as such procedures will require to be specially considered from the point of view of subsequent pollution of the atmosphere.

Further, after venting off the cargo residues the tank may have to be washed to complete the cleaning procedure and consideration must be given to any possible polluting effect of the resulting tank washings.

Regulation 6(b)

It is proposed that subparagraph (b) should be reworded as follows:

"(b) the escape into the sea of noxious liquid substances or mixtures containing such substances resulting from damage to a ship or its equipment if all reasonable precautions have been taken,

- (i) to avoid the damage to the ship or its equipment, and
- (ii) to prevent or minimize the escape: or "

Explanator ote

It is considered that reasonable precautions must be observed at all times to avoid accidental escape of noxious liquid substances. The proposed amendment emphasises the need for continuing awareness of this responsibility.

Regulation 8(1)(a)

It is proposed that the wording of subparagraph (a) should be changed to read as follows and conformity of wording established with other paragraphs and Regulation 9:

"....., the Master or officers in charge of the operations shall make an appropriate entry in the Cargo Record Book, and "

Explanatory Note

It is considered that uniformity of wording is required in Regulations 8 and 9 to establish responsibility for persons who are to make the appropriate entries in the Cargo Record Book. It is noted that in Regulation 9(4) the officers in charge of the operations and the Master are required to sign each page of the record book.

Regulation 8(1)(b)

It is suggested that subparagraph (b) should be changed to read as follows:

"(b) Until that tank is cleaned, every subsequent pumping or transfer operation carried out in connection with the tank shall also be entered in the Cargo Record Book".

Explanatory Note

The words "subsequent cargo operations" should be deleted because the tank could be affected by operations that were not related to cargo pumping or transfer, for example, the tank could be ballasted.

Regulation 8(2)(a)

It is proposed that subparagraph (a) should be amended by adding the words "until the tank is as empty as practicable" at the end of the second sentence, to conform with the wording of paragraph (1) of Regulation 5.

Further, it is proposed that subparagraph (a) should be amended by adding in the third sentence that entries shall be made in the Cargo Record Book, "....
.....by the Master or officers in charge of the operations and certified by a Surveyor".

Regulation 8(2)(b)

It is proposed that the wording of subparagraph (b) should conform to the wording of Regulation 5(1) as follows:

"(b) After diluting the residue then remaining in the tank with a volume of water of not less than 5% of the total volume of the tank this mixture may be discharged into the sea in accordance with the provisions of Regulation 5(1)(a), (b)(c) and (d) of this Annex. Appropriate entries of these operations shall be made in the Cargo Record Book by the Master or officers in charge of the operations".

Regulation 8(3)(a)

It is proposed that paragraph (a) should be reworded for clarification as follows:

"(a) a precleaning procedure for that tank and that substance has been developed and the Contracting Government is satisfied that such procedure will fulfil the provisions of Regulation 5(1) of this Annex with respect to the attainment of the prescribed residual concentration";

Explanatory Note

This requirement applies only to obtaining a prescribed residual concentration and it is considered that for greater clarity this should be specifically mentioned. It is noted that Regulation 5(1)(a) to (d) relate to subsequent discharge of the substance into the sea.

Regulation 8(4)(b)(ii)

It is proposed that subparagraph (b)(ii) should be reworded as follows:

"(b)(ii) ascertain that the quantity of substance remaining in the tank does not exceed the quantity on which the approved cleaning procedure is based or the maximum quantity which may be discharged into the sea for that substance under Regulation 5(2)(c) of this Annex in the case of Category B and Regulation 5(3)(c) of this Annex for Category C substances, whichever is less, and that appropriate entries have been made in the Cargo Record Book".

Explanatory Note

It is suggested that the wording of subparagraph (b)(ii) requires clarification because the cleaning procedure for the tank may be based on a quantity of substance that is less than the maximum quantities prescribed in subparagraphs 5(2)(c) and 5(3)(c).

Regulation 8(4)(b)(iii)(iv) and (v)

It is suggested that for clarification of the sequence of events subparagraphs (b)(iii)(iv) and (v) should be reworded as follows:

- "(iii) ensure, where it is intended to discharge the quantity of substance remaining into the sea, that the previously approved cleaning procedures have been complied with, that the necessary dilution of the substance satisfactory for such a discharge has been achieved and that the appropriate entries have been made in the Cargo Record Book;
- (iv) ensure, where the tank washings are not discharged into the sea, that if any internal transfer of washings takes place from that tank the appropriate entries are made in the Cargo Record Book; and
- (v) ensure that any subsequent discharge into the sea of such washings is made in accordance with the requirements of Regulation 5 of this Annex for the Category of substance involved".

Regulation 8(4)(c)

It is proposed that subparagraph (c) should be changed to read as follows:

- "(c) If the tank is to be cleaned in port,
 - (i) the tank washings shall be discharged to a reception facility and the Master or officers in charge of the operations shall make appropriate entries in the Cargo Record Book; or
 - (ii) the tank washings shall be retained on board the ship and the Master or officers in charge of the operations shall make appropriate entries in the Cargo Record Book indicating the location and disposition of the washings in accordance with the procedures approved by the Administration".

Explanatory Note

It is considered that a provision should be included in order that an alternative procedure may be established for the discharge of tank washings to a reception facility.

Regulation 10(1)(a)

It is proposed that the last sentence of subparagraph (a), commencing "In addition, the arrangements for discharge", should be deleted, consequential to the proposed changes in Regulation 5.

Regulation 10(1)(b)

It is proposed that subparagraph (b) should be amended to read as follows:
"(b) The Administration shall, after having satisfactorily surveyed a chemical tanker, issue a Certificate of Fitness for the Carriage of Noxious Liquid Substances in Bulk to the ship. The Administration shall also issue, as an appendage to the certificate, documents giving details of any cargo tank cleaning procedures approved by the Administration in connection with the implementation of Regulation 5 of this Annex".

Explanatory Note

It is considered that details of cargo tank cleaning procedures approved by the Administration should be contained in pages or documents complete and separate from the certificate and the use of the word "endorsed" is not sufficient for clear understanding of this requirement. The last sentence of paragraph (b), with reference to "discharge arrangements" has been deleted consequential to the proposed changes in Regulation 5.

Regulation 10(2)(a)(i)

It is proposed that subparagraph (a)(i) should be reworded as follows:
"(i) an initial survey for the purposes of the application of this Annex which shall include an inspection of the structure and equipment
.....".

Explanatory Note

It is considered that the existing wording "a survey before the ship enters service" is confusing and could be interpreted to mean that the application is only to new ships.

Regulation 10(2)(b)

In subparagraph (b) it is to be noted that under the present requirements of Annex I the International Oil Pollution Prevention Certificates (1973) will only be issued to ships of 400 tons and above that are on international voyages. Accordingly there may be ships that do not carry such a certificate but that will be making voyages in waters that are under the jurisdiction of

another State. It is therefore proposed that ships, other than chemical tankers, shall be issued a certificate of survey by the Administration which in effect could be a modified chemical tanker certificate.

Regulation 10(2)(c) (New)

It is proposed to introduce a new subparagraph (c) as follows similar to subparagraph (b) of paragraph (1) to require that ships other than chemical tankers shall be issued, by the Administration, with documents giving details of any approved cargo tank cleaning procedures:

"(c) The Administration shall, after having satisfactorily surveyed a ship other than a chemical tanker, issue to the ship documents giving details of any cargo tank cleaning procedures approved by the Administration in connection with the implementation of Regulation 5 of this Annex".

Explanatory Note

It is considered that a ship, other than chemical tanker, which carries noxious liquid substances in bulk will require approval for its tank cleaning procedures and should be provided with documents in this respect as for a chemical tanker.

Appendix I

It is proposed, and considered necessary for future adherence to the basic guidelines for categorization in the application of Regulation 3(3), that the phrase "when particular weight is given to additional factors in the hazard profile or to special characteristics of the substance" should be further clarified. It is to be noted that such additional factors and special characteristics were stated in IMCO Document PCMP/WP13/Add 1 and it is suggested that a similar table should be included in the Guidelines for Categorization in Appendix I.

DRAFT CONVENTION FOR THE
PREVENTION OF POLLUTION FROM SHIPS, 1973

Canadian Proposal for GUIDELINES ON PROCEDURES FOR CLEANING
TANKS THAT HAVE CONTAINED CATEGORY "B" or "C" SUBSTANCES

PROPOSAL.

To ensure uniformity between Contracting Governments and for subsequent operational control and enforcement it is proposed that guidelines for cleaning procedures should be included in the Convention to indicate how such procedures may be carried out in order to obtain the permissible concentrations for discharge into the sea of Category B and C substances.

The data attached as proposed Appendices V and VI indicate one method as to how tanks may be pre-cleaned and washed to attain the suggested permissible concentrations for discharge into the sea.

REASONS

It is considered that the wording of sub-paragraphs (2)(b) & (c) and (3)(b) & (c) of Regulation 5 of Annex II does not provide sufficient direction to the Administrations and does not afford sufficient control to meet the objectives of the Convention. The reference to "the concentration of the substance in the wake immediately astern of the ship" is, from a practical point of view, virtually unenforceable.

Also, the wording of sub-paragraph (4)(b) of Regulation 8 implies that the prescribed maximum quantity of Category B or C substance remaining in the tank, and which is permitted to be discharged into the sea, may be directly diluted to achieve a concentration that may be safely discharged into the sea. Closer examination of these procedures indicates that a pre-cleaning operation would in many instances be required to reduce the amount of residue in order that it might be subsequently diluted to a suitable concentration prior to discharge into the sea.

CONSIDERATIONS

At the Preparatory Meeting on Marine Pollution in February, 1973, the Working Group on Annex II gave considerable thought and time to the establishment of tank cleaning procedures to attain the permissible concentrations for discharge into the sea of Category A substance residues. It is suggested that time was not available at the Preparatory Meeting to give similar detailed consideration to Category B and C substances and it would appear appropriate and desirable that guidelines of similar procedures could be given for these substances, for pre-cleaning and dilution of the residue with water in volumes expressed as a percentage of the tank size, but without monitoring and analysis of the effluent.

In order to further control the concentrations of substances being discharged into the sea, and with recognition and acceptance of the GESAMP suggested minimum dilution factor of 1,000 achieved on discharge, it is proposed that for Category B and C substances the concentrations should not exceed 1 p.p.m. and 10 p.p.m. respectively, immediately following discharge into the sea rather than in the wake. Further, if these concentrations are adopted it would appear that there would be no necessity for providing elaborate discharge arrangements to ensure that the tank washings are so discharged as to be specially directed into the wake of the ship.

The data attached as proposed Appendices V & VI indicate one method as to how tanks may be precleaned and washed to attain the suggested permissible concentrations for discharge into the sea; and similar basic considerations were followed as was done in establishing the permissible concentrations for Category A substances.

Annex II presently includes, as Appendix I , the guidelines for categorization of the various substances and it does not therefore appear unreasonable to consider the inclusion of guidelines for procedures for the cleaning of tanks that have contained Category B or C substances.

The attached Appendices indicate the guidelines for tanks with capacities of 200 and 1,000 cubic metres with quantities of 1 and 2 cubic metres of substance remaining. From these examples Administrations would establish similar procedures for tanks of any other capacity related to the amount of substance remaining in the actual operating condition.

It is to be noted that for a tank of 200 cubic metres capacity the required dilution could only be achieved in one operation for a Category C substance by filling (100%) the tank with water. This however may not be the optimum operational procedure because, as the corresponding table shows, a much smaller quantity of wash water would have to be handled if the remaining substance was first diluted with water to 9% of the tank volume, the mixture discharged to a reception facility or slop tank, and the remaining residues diluted with water to 9% of the tank volume before discharging into the sea. The washing procedures adopted would possibly be dependant on the supplies of fresh water available, availability of reception facilities, and on the required turn around time for the ship.

CONCLUSION

Compliance with the discharge requirements for Category B and C substances is essentially dependant on the operational procedures for precleaning and subsequent washing of the tanks, and it is not overlooked that the adoption of this proposal will require the discharge of some Category B and C substance residues to reception facilities, in particular from tanks of smaller capacities. However, with respect to the ultimate objective of the Convention concerning the protection of the marine environment, this proposal has the additional provision that part of the quantity of Category B or C substance remaining in the tank could be transferred to a reception facility and not discharged into the sea.

Further, should this proposal be adopted, Draft Resolution could become unnecessary and subparagraphs (2)(b) and (3)(b) of Regulation 5 of Annex II may be reworded as follows:

"(2)(b) the procedures for cleaning of each tank and the dilution of the remaining substance shall be based on the guidelines given in Appendix V to this Annex and shall be such as to assure the Administration that the concentration of the substance immediately before discharge into the sea does not exceed 1,000 parts per million;"

"(3)(b) the procedures for cleaning of each tank and the dilution of the remaining substance shall be based on the guidelines given in Appendix VI to this Annex and shall be such as to assure the Administration that the concentration of the substance immediately before discharge into the sea does not exceed 10,000 parts per million;"

APPENDIX V

GUIDELINES FOR PRECLEANING AND WASHING OF TANKS

CATEGORY 'B' - SUBSTANCES

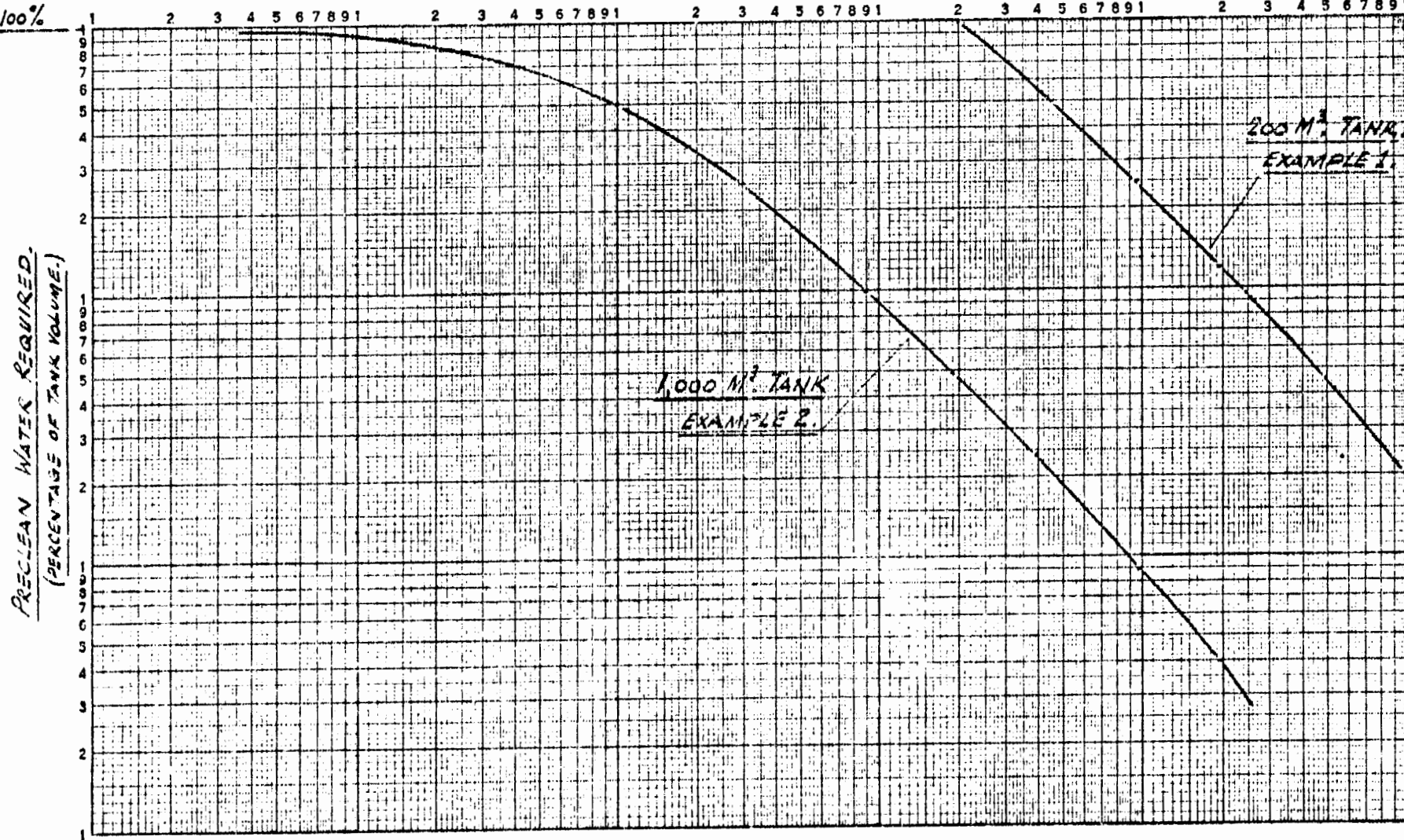
Example 1 Tank Capacity - 200 cubic metres
Quantity of Substance remaining - 1 cubic metre
Preclean Mixture remaining - 1 cubic metre
Permissible Concentration following discharge into the Sea - 1 p.p.m.
Max. Permissible Concentration before discharge into the Sea - 1000 p.p.m.

PRECLEAN.				SUBSEQUENT WASH.				AFTER DISCHARGE INTO THE SEA.		WASHINGS HANDLED.	
WATER REQUIRED		DILUTION	RESULTING	TO RECEPTION FACILITY, M ³	WATER REQUIRED.		DILUTION	RESULTING	GESAMP. DILUTION FACTOR.	RESULTING CONC. P.P.M.	VOL. M ³
VOL. M ³	%TANK	FACTOR.	CONC. P.P.M.		VOL. M ³	%TANK	FACTOR	CONC. P.P.M.			
199	99.5	200	5,000	199	4	2	5	1,000	1,000	1	410
99	49.5	100	10,000	99	9	4.5	10	1,000	1,000	1	220
49	24.5	50	20,000	49	19	9.5	20	1,000	1,000	1	140
24	12.0	25	40,000	24	39	19.5	40	1,000	1,000	1	130
19	9.5	20	50,000	19	49	24.5	50	1,000	1,000	1	140
9	4.5	10	100,000	9	99	49.5	100	1,000	1,000	1	220
4	2.0	5	200,000	4	199	99.5	200	1,000	1,000	1	410

Example 2 Tank Capacity - 1,000 cubic metres
Quantity of Substance remaining - 1 cubic metre
Preclean Mixture remaining - 1 cubic metre
Permissible Concentration following discharge into the Sea - 1 p.p.m.
Max. Permissible Concentration before discharge into the Sea - 1000 p.p.m.

PRECLEAN.				SUBSEQUENT WASH.				AFTER DISCHARGE INTO THE SEA.		WASHINGS HANDLED.	
WATER REQUIRED		DILUTION	RESULTING	TO RECEPTION FACILITY, M ³	WATER REQUIRED.		DILUTION	RESULTING	GESAMP. DILUTION FACTOR.	RESULTING CONC. P.P.M.	VOL. M ³
VOL. M ³	%TANK	FACTOR	CONC. P.P.M.		VOL. M ³	%TANK	FACTOR.	CONC. P.P.M.			
999	99.9	1000	1,000	NOT APPLICABLE EQUIV. TO WASH.	—	—	—	—	1,000	1	2,000
499	49.9	500	2,000	499	1	0.1	2	1,000	1,000	1	1,000
249	24.9	250	4,000	249	3	0.3	4	1,000	1,000	1	510
99	9.9	100	10,000	99	9	0.9	10	1,000	1,000	1	220
49	4.9	50	20,000	49	19	1.9	20	1,000	1,000	1	140
24	2.4	25	40,000	24	39	3.9	40	1,000	1,000	1	180
9	0.9	10	100,000	9	99	9.9	100	1,000	1,000	1	220
4	0.4	5	200,000	4	199	19.9	200	1,000	1,000	1	410

SUBSEQUENT WASH WATER REQUIRED.
 (PERCENTAGE OF TANK VOLUME.)



CATEGORY 'B' SUBSTANCE.

APPENDIX VI

GUIDELINES FOR PRECLEANING AND WASHING OF TANKS

CATEGORY 'C' - SUBSTANCES

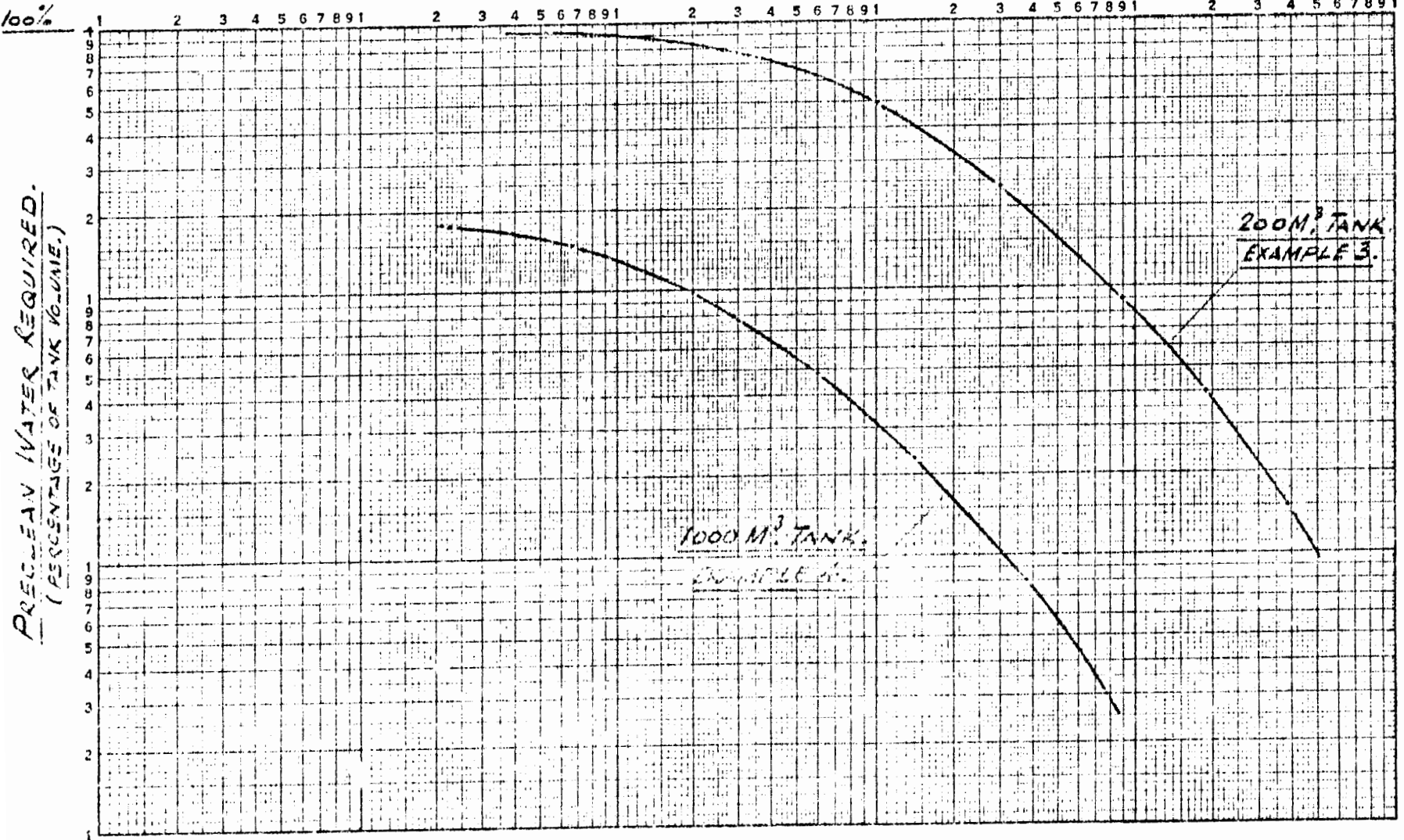
Example 3 Tank Capacity - 200 cubic metres
Quantity of Substance remaining - 2 cubic metres
Preclean Mixture remaining - 2 cubic metres
Permissible Concentration following discharge into the Sea - 10 p.p.m.
Max. Permissible Concentration before discharge into the Sea - 10,000 p.p.m.

PRECLEAN.					SUBSEQUENT WASH.			AFTER DISCHARGE INTO THE SEA.		WASHINGS HANDLED.	
WATER REQUIRED VOL. M ³	DILUTION %TANK.	RESULTING CONC. PPM.	TO RECEPTION FACILITY M ³	WATER REQUIRED VOL. M ³	DILUTION %TANK.	RESULTING CONC. PPM.	GESAMP DILUTION FACTOR.	RESULTING CONC. PPM.	VOL. M ³		
198	99.0	100	10,000	—	—	—	—	1,000	10	400	
188	91.0	95	10,520	188	0.1	0.05	1.05	10,000	1,000	10	380
98	49.0	50	20,000	98	2.0	1.0	2	10,000	1,000	10	205
48	24.0	25	40,000	48	6	3	4	10,000	1,000	10	110
18	9.0	10	100,000	18	18	9	10	10,000	1,000	10	80
8	4.0	5	200,000	8	38	19	20	10,000	1,000	10	32
3	1.5	2.5	400,000	3	78	39	40	10,000	1,000	10	164

Example 4 Tank Capacity - 1,000 cubic metres
Quantity of Substance remaining - 2 cubic metres
Preclean Mixture remaining - 2 cubic metres
Permissible Concentration following discharge into the Sea - 10 p.p.m.
Max. Permissible Concentration before discharge into the Sea - 10,000 p.p.m.

PRECLEAN.				SUBSEQUENT WASH.			AFTER DISCHARGE INTO THE SEA.		WASHINGS HANDLED.		
WATER REQUIRED VOL. M ³	DILUTION %TANK.	RESULTING CONC. PPM.	TO RECEPTION FACILITY M ³	WATER REQUIRED VOL. M ³	DILUTION %TANK.	RESULTING CONC. PPM.	GESAMP DILUTION FACTOR.	RESULTING CONC. PPM.	VOL. M ³		
198	19.8	100	10,000	—	—	—	—	1,000	10	400	
178	17.8	90	11,120	178	0.224	0.022	1.112	10,000	1,000	10	360
148	14.8	75	13,330	148	0.666	0.066	1.333	10,000	1,000	10	300
98	9.8	50	20,000	98	2.0	0.2	2.0	10,000	1,000	10	200
48	4.8	25	40,000	48	6	0.6	4	10,000	1,000	10	110
23	2.3	12.5	80,000	23	14	1.4	8	10,000	1,000	10	76
8	0.8	5	200,000	8	38	3.8	20	10,000	1,000	10	32
3	0.3	2.5	400,000	3	78	7.8	40	10,000	1,000	10	164

SUBSEQUENT WASH WATER REQUIRED.
 (PERCENTAGE OF TANK VOLUME.)



CATEGORY 'C' SUBSTANCE.

DRAFT CONVENTION FOR THE
PREVENTION OF POLLUTION FROM SHIPS, 1973

Canadian Proposal for Amendments to the DRAFT RESOLUTION
contained in the ADDENDUM TO FOOTNOTE 1 of ANNEX III.

It is to be noted that the proposed changes in text to this Draft Resolution and the accompanying Recommendations will in general similarly apply to the improvement of Draft Resolution 7 and the Regulations in Annex III.

Title of Draft Resolution
and paragraphs 1 and 3.

It is proposed that the title of the Draft Resolution and paragraphs 1 and 3 thereof should be reworded to include reference and application to "the tanks of motor vehicles or railway wagons".

Explanatory Note

It is considered that the intent of this Resolution was to include the case of motor tank vehicles and railway tank wagons carried on board ship. Specific reference thereto is considered essential for clarification of this application as established definitions in the Dangerous Goods Code for "cargo container" and "portable tank" do not include the tanks of road vehicles and railway wagons.

Paragraph 6

It is proposed, commencing at paragraph 6, that for clarification and improvement of text the Draft Resolution should be reworded as follows:

"RECOGNIZING that provisions concerning harmful substances, as defined in Article 2(3) of the International Convention for the Prevention of Pollution from Ships, 1973, must be specified and be complementary to those which have been adopted for the carriage of dangerous goods by sea,

RECOMMENDS that:

- (a) the Organization pursue and encourage studies of the impact that the carriage by sea of such harmful substances in packaged form, cargo containers, portable tanks or in the tanks of motor vehicles or railway wagons may have upon the marine environment;

NOTE: The purpose of the underlining of words and phrases is to indicate the proposed changes in text.

(b) the results of such studies

(i) be directed towards the revision of the scope of the International Maritime Dangerous Goods Code or the development of an International Harmful Substances Code, in either case taking into account

(A) substances that are harmful to the marine environment whether or not classed as dangerous goods;

(B) the minimization of the threat to the marine environment that arises from the carriage by sea of the substances that will be enumerated in such codes; and

(C) safety in maritime transport; or

(ii) be directed towards

(A) the revision of the International Maritime Dangerous Goods Code with respect to the minimization of the threat to the marine environment that arises from the carriage by sea of the substances that are enumerated in the Code; and

(B) the development of an International Harmful Substances Code that takes into account the minimization of the threat to the marine environment, that arises from the carriage by sea of the substances that will be enumerated in such a Code, and safety in maritime transport;

(c) in such revision and development, particular account be taken of:

(i) packaging,

(ii) marking and labelling,

(iii) documentation,

(iv) stowage

(v) quantity limitations,

(vi) prohibition of discharge,

(vii) exceptions,

(viii) arrangements for recovery, and

(ix) loading and unloading;

Explanatory Note

The proposed rewording of the preceding paragraph (b) introduces into this Recommendation an alternative proposal for revision of the Dangerous Goods Code and the development of a Harmful Substances Code.

It is considered that the original intent and scope of the Dangerous Goods Code, with respect to the protection of the ship and the safety of persons on board, should not be changed. However the Dangerous Goods Code would have to be revised with regard to packaging, stowage, etc., to become compatible with similar requirements from the pollution prevention point of view as would be contained in the Harmful Substances Code.

The proposed rewording of the preceding paragraph (c) is consequential to the proposed rewording of Recommendation 7 and the addition of the proposed new Recommendation with respect to loading and unloading of harmful substances.

- (d) Contracting States consider adoption of the format of the International Maritime Dangerous Goods Code for the systematic development of regulations and standards for the carriage by sea of such harmful substances in packaged form, cargo containers, portable tanks or in the tanks of motor vehicles or railway wagons so as to ensure compatibility between safety requirements and provisions relating to pollution prevention; and
- (e) the recommended practices and guidelines in the attached Appendix to this Resolution form the basis for the subsequent development of the Regulations for inclusion in Annex III to the International Convention for the Prevention of Pollution from Ships, 1973,

INVITES Governments

- (a) to adopt, pending the development of such Convention provisions, the recommendations contained in the Appendix to this Resolution as a basis for national measures; and

(b) to issue, or cause to be issued, detailed instructions on packaging, marking and labelling, documentation, stowage, quantity limitations, prohibition of discharge, exceptions, arrangements for recovery, and loading and unloading, for preventing or minimizing pollution of the marine environment by harmful substances. "

Explanatory Note

The proposed rewording of the preceding paragraph (b) is consequential to the proposed rewording of Recommendation 7 and the addition of the proposed new Recommendation with respect to loading and unloading of harmful substances.

DRAFT CONVENTION FOR THEPREVENTION OF POLLUTION FROM SHIPS, 1973

Canadian Proposal for Amendments to the Appendix to the DRAFT RESOLUTION
contained in the ADDENDUM TO FOOTNOTE 1 of ANNEX III.

Title of Appendix and
Recommendations 1, 2, and 3.

It is proposed that the title of the Appendix and Recommendations 1, 2, and 3 should be reworded to include reference and application to "the tanks of motor vehicles or railway wagons".

Explanatory Note

It is considered that the intent of this Appendix was to include the case of motor tank vehicles and railway tank wagons carried on board ship. Specific reference thereto is considered essential for clarification of this application as established definitions in the Dangerous Goods Code for "cargo container" and "portable tank" do not include the tanks of road vehicles and railway wagons.

Recommendation 4(3)

It is proposed that paragraph (3) should be reworded as follows:

"(3) Each ship carrying harmful substances should have a special list or manifest and a detailed stowage plan setting forth the harmful substances on board and the location thereof. Copies of such documents should also be retained on shore by the owner of the ship or his representative until the harmful substances are unloaded".

Explanatory Note

It is considered that documentation must be kept on board the ship for possible examination by surveyors at the receiving port and documentation must be retained by the owner of the ship or his representative for the purpose of reference in the event of a major incident occurring to the ship.

Recommendation 4(4)

It is proposed that paragraph (4) should be clarified by rewording as follows:

"(4) In a case where the ship carries a special list or manifest or a detailed stowage plan, required for the carriage of dangerous goods by the International Convention for the Safety of Life at Sea in force, the information required for the purpose of paragraph (3) may be included on the list, manifest or stowage plan for dangerous goods".

Recommendation 6

It is proposed that recommendation 6 should be reworded as follows:

"Certain harmful substances which are very hazardous to the marine environment should either be prohibited for carriage or should be limited as to the quantity which may be carried aboard any one ship. In limiting the quantity due consideration should be given to size, construction and equipment of the ship as well as to the packaging and the inherent nature of the substance".

Explanatory Note

It is suggested that consideration must be given to the type of packaging when considering quantity limitations.

Recommendation 7

It is proposed that recommendation 7 should be rewritten to provide separate recommendations for prohibition of discharge into the sea and for the required exceptions as follows:

" Recommendation 7
Prohibition of Discharge

Subject to the provisions of Recommendation 7A of this Appendix,

- (a) the discharge into the sea of harmful substances carried in packaged form or in cargo containers or in portable tanks or in the tanks of motor vehicles or railway wagons should be prohibited; and
- (b) the discharge into the sea of harmful substances resulting from drainage, leakage or accidental spillage from packages, cargo containers, portable tanks or the tanks of motor vehicles or railway wagons should be prohibited.

Recommendation 7A

Exceptions

Recommendation 7 of this Appendix should not apply to,

- (a) the discharge into the sea of harmful substances where necessary for the purpose of securing the safety of the ship or saving life at sea; and
- (b) the discharge into the sea of washings containing harmful substances resulting from leakage or accidental spillage where, subject to the provisions of the International Convention for the Prevention of Pollution from Ships, 1973, and with respect to the safety of the ship and persons on board, appropriate measures based on the physical, chemical and biological properties of harmful substances have been taken to regulate the washing overboard of such leakage or accidental spillage. "

Proposed New Recommendation

It is proposed that an additional recommendation should be introduced as follows:

" Loading and Unloading

With respect to certain harmful substances as may be designated by a Contracting State, the master or owner of the ship or his representative should, before loading or unloading such substances, notify the appropriate port authority in order that it may take any special measures necessary in preparation for handling those substances and provide any safeguards that may be required in the event that an accidental discharge of those substances should occur. "
