

Subject:

"Amendments to the IBC and BCH Code
and Appendices II and III of Annex II
of MARPOL 73/78"

NK TECHNICAL INFORMATION

No.79

Date: 1 November, 1989

To: Owners and Shipbuilders concerned

The amendments to the IBC and BCH Codes (MEPC 19(22) and the MEPC 20(22)) and the corresponding amendments to Annex II of MARPOL 73/78 (MEPC 16(22)) were adopted by the Marine Environment Protection Committee (MEPC) at twenty-seventh session as Resolutions MEPC 32(27), MEPC 33(27) and MEPC 34(27) respectively, and also the amendments to the IBC and BCH Codes were adopted by the Maritime Safety Committee (MSC) at fifty-seventh session as Resolutions MSC 14(57) and MSC 15(57) respectively.

The main points of these amendments are summarized below;

- (1) Harmonization of IBC/BCH Codes and Annex II of MARPOL 73/78.
(reviewing and eliminating any anomalies between the pollution categories and the minimum carriage requirements, and preparing a harmonized list of products.)
- (2) Reevaluation of the pollution categories and the minimum carriage requirements of individual products.
- (3) Addition of newly-assessed products.

The newly-adopted amendments, if the authorized steps are taken as scheduled, are to come into force on 13 October, 1990 and apply to both new and existing ships, except the relaxation of the requirement on the ship-type for the carriage of coal tar.

We would like to inform you, in advance of the application of the amendments, of the summary of amendments as attached, and advise you to review your cargo loading plan in compliance with the amendments.

Should you have any question on this matter, please feel free to contact "Tanker Section", Hull department of our Head office.

Attachments: Summary of amendments

(Note) Summary of amendments is prepared on the basis of MEPC 27/16
Corr.1.



Summary of Amendments

1. IBC Code (Chapter 17)

Products which are newly added (86)	Newly-assessed products (76)	(See the attached "APPENDIX 1".)
	Up-graded products (10)	Products up-graded from Chapter 18 to Chapter 17 (See the symbol * of the attached "APPENDIX 1".)
Products which are down-graded or renamed (22)	Down-graded products (2)	Products down-graded from Chapter 17 to Chapter 18; (i) "Dodecylbenzene" (ii) "Fatty alcohols (C12 - C20)"
	Renamed products (20)	(See the attached "APPENDIX 2".)
Products of which minimum carriage requirements are revised (Total 161)	Pollution category (19)	(See the attached "APPENDIX 3".)
	Ship type (2)	(i) "Creosote (coal tar)"; "3" to "2" (ii) "alpha-Methylstyrene"; "2" to "3"
	Electrical equipment (5)	(i) "Carbon disulphide"; "T5" to "T6" (ii) "1,4-Dioxane"; "T4" to "T2" (iii) "Ethyl methacrylate"; "Nil" to "T2" (iv) "2-Methyl-2-hydroxy-3-butyne"; "Nil" to "II A" (v) "Sodium hypochlorite solution, 15% or less"; "NF" to "Yes"
	Fire protection (78)	Products for which foam A (alcohol-resistant foam or multi-purpose foam) is evaluated effective by reviewing the fire extinguishing media. (See the attached "APPENDIX 4".)
	Materials (2)	(i) "Chloroform"; "Nil" to "Z" (ii) "Urea/Ammonium nitrate solution (containing aqua ammonia)"; "N4, N7" to "N7"
	Special requirements (55)	Products to which the special requirements of 15.19.6 are added by reviewing the cargo tank overflow requirements. (See the attached "APPENDIX 5".)

(Note) () shows the number of the amended products.

2. BCH Code (Chapter VI)

Products which are newly added (86)	Newly-assessed products (76)	(See the attached "APPENDIX 1".)
	Up-graded products (10)	Products up-graded from Chapter VII to Chapter VI (See the symbol * of the attached "APPENDIX 1".)
Products which are down-graded or renamed (22)	Down-graded products (2)	Products down-graded from Chapter VI to Chapter VII; (i) "Dodecylbenzene" (ii) "Fatty alcohols (C12 - C20)"
	Renamed products (20)	(See the attached "APPENDIX 2".)
Products of which minimum carriage requirements are revised (Total 155)	Pollution category (19)	(See the attached "APPENDIX 3".)
	Ship type (2)	(i) "Creosote (coal tar)" ; "3" to "2" (ii) "alpha-Methylstyrene" ; "2" to "3"
	Electrical equipment (1)	"Carbolic oil" ; "Sp" to "St"
	Fire protection (78)	Products for which foam A (alcohol-resistant foam or multi-purpose foam) is evaluated effective by reviewing the fire extinguishing media. (See the attached "APPENDIX 4".)
	Special requirements (55)	Products to which the special requirements of 4.14.1 are added by reviewing the cargo tank overflow requirements. (See the attached "APPENDIX 5".)

(Note) () shows the number of the amended products.

3. Appendix II of MARPOL Annex II

Products which are newly added (86)	(See the pollution category of the attached "APPENDIX 1")
Products of which the pollution categories are reviewed (19)	(See the attached "APPENDIX 3")

(Note) () shows the number of the amended products.

APPENDIX 1

Products which are newly added (*:Up-graded products)

Products	Poll. Cat.	Hazard	Ship Type
Alcohol (C12-C15) poly(1-3) ethoxylates	A	P	2
Alcohol (C12-C15) poly(3-11) ethoxylates	A	P	2
Alcohol (C6-C17)(secondary) poly(3-6) ethoxylates	A	P	2
Alcohol (C6-C17)(secondary) poly(7-12) ethoxylates	B	P	3
Alkyl benzene sulphonic acid, sodium salt solution	C	P	3
Aluminium chloride (30% or less)/Hydrochloric acid (20% or less) solution	D	S	3
2-Amino-2-methyl-1-propanol (90% or less)	D	S	3
Ammonium thiocyanate (25% or less)/Ammonium thiosulphate (20% or less) solution	(C)	P	3
Ammonium thiosulphate solution (60% or less)	(C)	P	3
Aviation alkylates (C8 paraffins and iso-paraffins BPT 95-120°C)	(C)	P	3
Benzyl acetate	C	P	3
* Butene oligomer	B	P	3
Butylbenzenes (all isomers)	(A)	P	2
n-Butyl butyrate	(C)	P	3
1,2-Butylene oxide	C	S / P	3
* Calcium alkyl salicylate	C	P	3
Chlorinated paraffins (C10-C13)	A	P	1
Coal tar	A	S / P	2**
Coal tar pitch (molten)	D	S	3
Coconut oil fatty acid	C	P	3
Cresylic acid, sodium salt solution	A	S / P	2
Cycloheptane	(C)	P	3
Cyclohexyl acetate	(B)	P	3
* 1,3-Cyclopentadiene dimer (molten)	B	P	2
Cyclopentane	(C)	P	3
Cyclopentene	(B)	P	3
Decanoic acid	C	P	3
Diglycidyl ether of bisphenol F	B	P	3
Di-n-hexyl adipate	B	P	3
N,N-Dimethylacetamide solution (40% or less)	D	S	3
Dimethyl adipate	B	P	3
Dimethyl glutarate	C	P	3
Dimethyl octanoic acid	(C)	P	3
Dimethyl succinate	C	P	3
Diphenyl	A	P	1
Diphenyl/Diphenyl ether mixtures	A	P	1
Diphenylol propane-epichlorohydrin resins	B	P	3
Drilling brines, containing zinc salts	(A)	P	2
Ethyl amyl ketone	C	P	3
Ethyl butyrate	C	P	3
* Ethylcyclohexane	(C)	P	3
* Ethylene glycol butyl ether acetate	(C)	P	3
Ethylene glycol diacetate	C	P	3
o-Ethylphenol	(A)	S / P	3
Ferric chloride solutions	C	S / P	3
Ferric nitrate/Nitric acid solution	C	S / P	2

Products	Poll. Cat.	Hazard	Ship Type
* Heptane (all isomers)	(C)	P	3
* Hexane (all isomers)	(C)	P	3
Isopropylcyclohexane	(C)	P	3
Lactonitrile solution (80% or less)	B	S / P	2
Lauric acid	B	P	3
Metam sodium solution	A	S / P	3
Methyl butyrate	(C)	P	3
Methylcyclohexane	(C)	P	3
Methylcyclopentadiene dimer	(B)	P	3
Methyl heptyl ketone	B	P	3
Naphthenic acids	A	P	2
* Nonane (all isomers)	(C)	P	3
Nonyl phenol poly(4-12) ethoxylates	B	P	3
Noxious liquid, N.F, (1) n.o.s. (trade name..., contains...) S.T.1, Cat.A ***	A	P	1
Noxious liquid, F, (2) n.o.s. (trade name..., contains...) S.T.1, Cat.A ***	A	P	1
Noxious liquid, N.F, (3) n.o.s. (trade name..., contains...) S.T.2, Cat.A ***	A	P	2
Noxious liquid, F, (4) n.o.s. (trade name..., contains...) S.T.2, Cat.A ***	A	P	2
Noxious liquid, N.F, (5) n.o.s. (trade name..., contains...) S.T.2, Cat.B ***	B	P	2
Noxious liquid, N.F, (6) n.o.s. (trade name..., contains...) S.T.2, Cat.B, *** mp 15°C+	B	P	2
Noxious liquid, F, (7) n.o.s. (trade name..., contains...) S.T.2, Cat.B ***	B	P	2
Noxious liquid, F, (8) n.o.s. (trade name..., contains...) S.T.2, Cat.B, *** mp 15°C+	B	P	2
Noxious liquid, N.F, (9) n.o.s. (trade name..., contains...) S.T.3, Cat.A ***	A	P	3
Noxious liquid, F, (10) n.o.s. (trade name..., contains...) S.T.3, Cat.A ***	A	P	3
Noxious liquid, N.F, (11) n.o.s. (trade name..., contains...) S.T.3, Cat.B ***	B	P	3
Noxious liquid, N.F, (12) n.o.s. (trade name..., contains...) S.T.3, Cat.B, *** mp 15°C+	B	P	3
Noxious liquid, F, (13) n.o.s. (trade name..., contains...) S.T.3, Cat.B ***	B	P	3
Noxious liquid, F, (14) n.o.s. (trade name..., contains...) S.T.3, Cat.B, *** mp 15°C+	B	P	3
Noxious liquid, N.F, (15) n.o.s. (trade name..., contains...) S.T.3, Cat.C ***	C	P	3
Noxious liquid, F, (16) n.o.s. (trade name..., contains...) S.T.3, Cat.C ***	C	P	3
* Octane (all isomers)	(C)	P	3
Octyl aldehydes	(B)	P	3
Octyl nitrates (all isomers)	A	S / P	2

Products	Poll. Cat.	Hazard	Ship Type
Palm nut oil fatty acid	(C)	P	3
Polyferric sulphate solution	(C)	S / P	3
n-Propylbenzene	(C)	P	3
* Propylene tetramer	B	P	3
Sodium hydrogen sulphite solution (35% or less)	D	S	3
Sodium nitrite solution	B	S / P	2
Sodium thiocyanate solution (56% or less)	(B)	P	3
1,2,3,5-Tetramethylbenzene	(C)	P	3
Undecanoic acid	(C)	P	3

For ships constructed before the date of entry into force of the present amendments which are engaged solely on voyages between ports or terminals within the State the flag of which the ship is entitled to fly, the ship-type requirement applies ten years after entry into force of the amendments.

For ships constructed before the date of entry into force of the present amendments, which are engaged on voyages from, to or between port terminals within States other than the State the flag of which the ship is entitled to fly, the ship-type requirement applies five years after the entry into force of the amendments, provided that the ship satisfies all the following conditions:

- 1 the ship has been regularly engaged in the trade of coal tar for at least five years before the date of entry into force of the present amendments;
- 2 the ship is solely engaged on restricted voyages as determined by the Administration;
- 3 the Certificate of Fitness is endorsed to the effect that the ship is solely engaged in such restricted voyages, with the expiry date of the period of grace; and
- 4 the five year period of grace is agreed among the Governments concerned.

In case of a specific n.o.s. cargo assessed as falling within this n.o.s. group that is carried on a ship, this entry the cargo's trade name and one or two principle components, should be provided in the shipping document. Abbreviations

N.F.:	Flashpoint exceeding 60°C (closed cup test)	S.T.:	Ship type
F:	Flashpoint not exceeding 60°C (closed cup test)	Cat.:	Pollution category
n.o.s.:	Not otherwise specified	m.p.:	Melting point

APPENDIX 2

Renamed products

<i>Original</i>	<i>Amended</i>
Calcium hypochlorite solution	Calucium hypochlorite solution (15% or less)
	Calucium hypochlorite solution (more than 15%)
Cresols (mixed isomers)	Cresols (all isomers)
o-Dichlorobenzene	Dichlorobenzenes (all isomers)
2,4-Dichlorophenoxyacetic acid, dimethylamine salt, (70% or less) solution	2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution (70% or less)
Diethylethanolamine	Diethylaminoethanol
Diphenyl oxide/Diphenyl phenyl ether mixtures	Diphenyl ether/Diphenyl phenyl ether mixture
Dodecyl diphenyl oxide disulphonate solution	Dodecyl diphenyl ether disulphonate solution
Ethylene oxide/propylene oxide mixtures with an ethylene oxide content of not more than 30% by weight	Ethylene oxide/Propylene oxide mixtures with an ethylene oxide content of not more than 30% in weight
n-Hexane	Hexane (all isomers)
l-Hexene	Hexene (all isomers)
(o- and p-) Nitrotoluenes	o- or p-Nitrotoluenes
Nonane	Nonane (all isomers)
Nonyl alcohol	Nonyl alcohol (all isomers)
Octane	Octane (all isomers)
Olefin, straight chain mixtures	Olefin mixtures (C5-C7)
	Olefin mixtures (C5-C15)
n-Pentane	Pentane (all isomers)
Phthalic anhydride	Phthalic anhydride (molten)
Tall oil, crude and distilled	Tall oil (crude and distilled)
1,2,4-Trimethylbenzene	Trimethyl benzenes (all isomers)
Urea/Ammonium solution (containing aqua ammonia)	Urea/Ammonium nitrate solution (containing aqua ammonia)

APPENDIX 3

Products of which the pollution categories are reviewed

<u>Products</u>	<u>Pollution Category</u>
Acetic acid	"C" to "D"
Acetic anhydride	"C" to "D"
n-Butyl acrylate	"D" to "B"
Butyric acid	"B" to "D"
Calcium hypochlorite solution (15% or less)	"B" to "C"
Carbon disulphide	"A" to "B"
Creosote (coal tar)	"(C)" to "A"
Ethyl acrylate	"B" to "A"
2-Ethylhexyl acrylate	"D" to "B"
Isobutyl acrylate	"D" to "B"
Methyl acrylate	"C" to "B"
Neodecanoic acid	"(B)" to "C"
Pinene	"A" to "B"
Pyridine	"B" to "D"
Rosin	"A" to "B"
Sodium dichromate solution (70% or less)	"B" to "C"
Sodium hypochlorite solution (15% or less)	"B" to "C"
Tall oil (crude and distilled)	"A" to "B"
Vinyl neodecanoate	"C" to "B"

APPENDIX 4

Products for which the fire extinguishing media are reviewed

Products

Fire Protection

Alkyl benzene sulphonic acid	"A"
2-(2-Aminoethoxy) Ethanol	"A,D"
N-Aminoethylpiperazine	"A"
Ammonia aqueous (28% or less)	"A,B,C"
Ammonia sulphide solution (45% or less)	"A"
Benzene and mixtures having 10% benzene or more	"A,B"
Benzenesulphonyl chloride	"A,D"
Benzyl chloride	"A,B"
Butyl/decyl/cetyl/eicosyl methacrylate mixture	"A,D"
n-Butyl ether	"A"
Camphor oil	"A,B"
Cashew nut shell oil (untreated)	"A,B"
Cetyl/eicosyl methacrylate mixture	"A,D"
Chlorobenzene	"A,B"
o-Chloronitrobenzene	"A,B,D"
m-Chlorotoluene	"A,B"
o-Chlorotoluene	"A,B"
p-Chlorotoluene	"A,B"
Chlorotoluenes (mixed isomers)	"A,B"
Creosote (coal tar)	"A,D"
Creosote (wood)	"A,D"
Cresols (mixed isomers)	"A,B"
Cyclohexylamine	"A,C"
Dibutylamine	"A,C,D"
Dichlorobenzenes (all isomers)	"A,B,D"
1,1-Dichloroethane	"A"
2,2-Dichloroisopropyl ether	"A,C,D"
2,4-Dichlorophenol	"A"
1,2-Dichloropropane	"A,B"
1,3-Dichloropropane	"A,B"
1,3-Dichloropropene	"A,B"
Dichloropropene/dichloropropane mixtures	"A,B,D"
Diethylaminoethanol	"A,C"
Di-(2-ethylhexyl) phosphoric acid	"A,D"
Diethyl sulphate	"A"
Diisobutylamine	"A,C,D"
Dimethylamine solution (45% or less)	"A,C,D"
Diphenylmethane diisocyanate	"A,B,C(c),D"
Dodecyl methacrylate	"A"
Dodecyl/pentadecyl/methacrylate mixture	"A,D"
N-Ethylcyclohexylamine	"A"
Ethylene chlorohydrin	"A,D"
Ethylene dichloride	"A,B"
Ethylidene norbornene	"A,D"
Ethyl methacrylate	"A,D"
Isophorone diisocyanate	"A,B,D"
Methyl acrylate	"A"
2-Methyl-6-ethyl aniline	"A,D"
2-Methyl-5-ethyl pyridine	"A,D"
2-Methyl-2-hydroxy-3-butyne	"A,B,D"
Methyl methacrylate	"A"
2-Methyl pyridine	"A"
4-Methyl pyridine	"A"

ProductsFire Protection

Motor fuel anti-knock compounds	"A,C"
Nitrobenzene	"A,D"
o-Nitrophenol, molten	"A,D"
Nitropropane (60%)/nitroethane (40%) mixture	"A(u)"
(o- or p-) Nitrotoluene	"A,B"
1,3-Pentadiene	"A,B"
1-Phenyl-1-xylyl ethane	"A,B"
Phthalic anhydride (molten)	"A,D"
Polymethylene polyphenyl isocyanate	"A"
n-Propylamine	"A,D"
Sodium hydrosulphide/Ammonium sulphide solution	"A"
Styrene monomer	"A,B"
Tetrahydrofuran	"A"
Toluenediamine	"A,D"
Toluene diisocyanate	"A,C(c),D"
o-Toluidine	"A"
1,2,4-Trichlorobenzene	"A,B"
1,2,3-Trichloropropane	"A,B,D"
Tricresyl phosphate (containing 1% or more ortho-isomer)	"A,B"
Triethylamine	"A,C"
Triethyl phosphite	"A,B"
Trimethylacetic acid	"A"
Vinyl neodecanoate	"A,B"
Vinyltoluene	"A,B"
Xylenol	"A,B"

VOID

APPENDIX 5

Products to which the special requirements of 15.19.6 (4.14.1) are added

Products

n-Butyl acrylate
n-Butyraldehyde
Calcium naphthenate in mineral oil
Chloroform
m-Chlorotoluene
o-Chlorotoluene
Coal tar naphtha solvent
Creosote (coal tar)
Crotonaldehyde
Decyl alcohol (all isomers)
1,1-Dichloroethane
Dichloroethyl ether
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-Dichloropropane
Diglycidyl ether of bisphenol A
Diisobutyl phthalate
Diphenyl ether
Diphenyl ether/Diphenyl phenyl ether mixture
Dodecene (all isomers)
Dodecyl alcohol
Dodecyl diphenyl ether disulphonate solution
Ethyl acrylate
2-Ethylhexyl acrylate
2-Ethylhexylamine
2-Ethyl-3-propylacrolein
Fumaric adduct of rosin, water dispersion
Glycidyl ester of C10 trialkylacetic acid
Heptyl acetate
Isobutyl acrylate
Mercaptobenzothiazol, sodium salt solution
Methyl acrylate
2-Methyl-5-ethyl pyridine
N-Methyl-2-pyrrolidone
Methyl salicylate
Perchloroethylene
Pyridine
Rosin
Rosin soap (disproportionated) solution
Sodium hydrosulphide solution (45% or less)
Styrene monomer
Tall oil (crude and distilled)
Tall oil soap (disproportionated) solution
Tetrachloroethane
Tributyl phosphate
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
1-Undecene
Undecyl alcohol*
Vinylidene chloride
Vinyl neodecanoate
Xylenol