

Amendments to the IBC Code and MARPOL Annex II



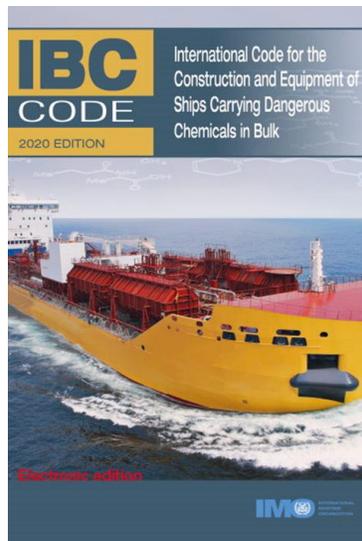
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New Amendments – *Enter into force: January 1, 2021*

New IBC Code:

- Reclassification of products
- Revised carriage requirements / New Certificate of Fitness (CoF)



Amended MARPOL Annex II:

- Handling of cargo residues and tank washings of persistent floating products
- Revised Procedure & Arrangement (P&A) Manual



Main Impacts

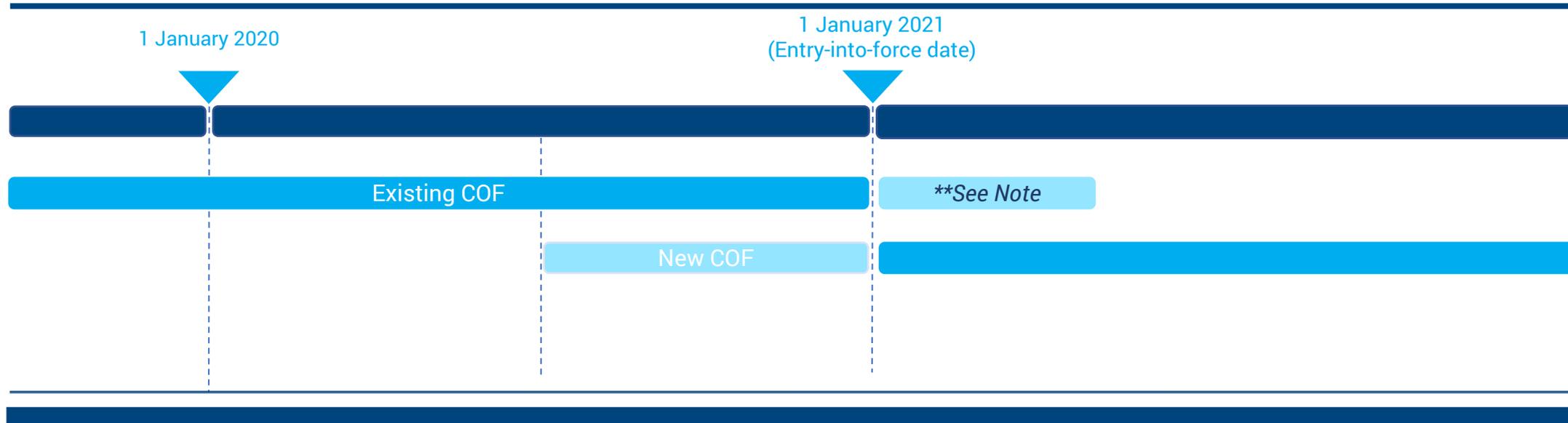
New IBC Code:

- Certificate of Fitness (CoF) – Most of the changes are insignificant, but there will be products in the previous CoF that will no longer be allowed to carry after January 1, 2021
- Reclassification of products - The handling and safety requirements will change for majority of the Product names
 - New Toxic products
 - New requirements for H2S Detection Equipment for vessels carrying bulk liquids prone to H2S formation
 - Products moved from Chapter 18 to Chapter 17
 - New Ship type requirements for many products
 - New Tank type requirements for some products

MARPOL Annex II:

- Updated P&A Manual
- Persistent floating products - New prewash requirements in a new special area covering North West Europe
- Waxes - New classification of Waxes
- Energy Rich Fuels – Recategorization from Annex II to Annex I
- MARPOL category – Several products will have a new category (X, Y, Z)

Timeline



Note: “When a cargo is loaded prior to the entry-into-force date and unloaded after the entry-into-force date, of the amendments to the IBC Code, the relevant provisions of the IBC Code at the time of loading should be applicable until the cargo has been unloaded.”

----- **DNV-GL TECHNICAL AND REGULATORY NEWS No. 21/2019 – STATUTORY**

New Requirements For H2S Detection

- A new requirement for gas detection equipment for Hydrogen Sulphide (H2S) for vessels carrying cargoes prone to H2S formation will be included in the IBC Code

Note: *The new requirement will not have much impact, as the equipment used by most owners and managers already comply with the new requirement*



Cargoes moved from Chapter 18 to Chapter 17

- Calcium nitrate solution (50% or less)
- Diethylene glycol
- Glycerine
- Hexamethylenetetramine solutions
- Hexylene glycol
- Magnesium Hydroxide slurry
- N-Methylglucamine solution (70% or less)
- Methyl propyl ketone
- Polyaluminium chloride solution
- Polyglycerin, sodium salt solution (containing less than 3% sodium hydroxide)
- Potassium formate solutions
- Propylene carbonate
- Sodium sulphate solutions

* NO. OF IBC CODES	c	d	e	f	g	h	P	P'	P''	j	k	l	m	n	o	* NO. OF IBC CODES	
																+	-
Acetic acid	J	S ⁰	3	2G	Cont	No	13	BA	No	C	I	AC	No	15.13.2, 15.13.3, 15.13.4, 15.13.6, 15.13.7, 15.13.8, 15.13.15, 16.2.9			
Acetic anhydride	J	S ⁰	2	2G	Cont	No	13	BA	No	R	II	AC	No	15.13.2, 15.13.3, 15.13.4, 15.13.6, 15.13.7, 15.13.8, 15.13.15, 15.13.4, 15.13.6			
Acetone	X	S ⁰	2	2G	Open	No				No	C	I	AC	No	15.13.2, 15.13.3, 15.13.4, 15.13.6, 15.13.7, 15.13.8, 15.13.15, 16.2.9		
Acetone cyanohydrin	V	S ⁰	1	2G	Cont	No				No	C	I	AC	No	15.13.1, 15.13.15, 15.13.16.3, 16.6.2, 16.6.3		
Acetonitrile	J	S ⁰	2	2G	Cont	No	13	BA	No	R	II	AC	No	15.13.2, 15.13.4, 15.13.6			
Acetonitrile (low purity grade)	V	S ⁰	3	2G	Cont	No	13	BA	No	R	II	AC	No	15.13.3, 15.13.4, 15.13.6			
Acid of oxitan from step 100, containing and without oil solvent	V	S ⁰	2	2G	Open	No				No	C	I	AC	No	15.13.6, 16.2.6, 16.2.7, 16.2.9		
Acrylonitrile solution (25% or less)	V	S ⁰	3	2G	Cont	No				No	C	I	AC	No	15.13.1, 15.13.15, 15.13.16.3, 16.6.3		
Acrylic acid	V	S ⁰	2	2G	Cont	No	13	BA	No	C	II	AC	No	15.13.2, 15.13.3, 15.13.4, 15.13.6, 15.13.7, 15.13.8, 15.13.15, 15.13.4, 15.13.6, 15.13.15, 16.2.9, 16.6.3			
Acrylic acid/terephthalic acid copolymer with phosphoric groups, without oil solvents	J	P	3	2G	Open	No				No	C	I	AC	No	15.13.1, 15.13.15, 15.13.16.3		
Acrylonitrile	V	S ⁰	2	2G	Cont	No	13	BA	No	C	II	AC	No	15.13.1, 15.13.15, 15.13.16.3			
Acrylonitrile-styrene copolymer dispersion in petroleum grades	V	P	3	2G	Open	No				No	C	I	AC	No	15.13.6, 16.2.6		
Adiponitrile	J	S ⁰	2	2G	Cont	No				No	C	I	AC	No	15.13.1, 15.13.15, 16.2.9		
Alkyl alcohol (20% or more)	X	S ⁰	2	2G	Cont	No				No	C	I	AC	No	15.13.1, 15.13.15, 16.2.9		
Alcohol (C ₁₂ -C ₁₄) poly(2,5-furazan)	V	S ⁰	3	2G	Cont	No				No	R	I	AC	No	15.13.3, 15.13.4, 15.13.6, 16.2.9		
Alcohol (C ₁₂ -C ₁₄) secondary poly(2-furazan)	V	S ⁰	2	2G	Cont	No				No	C	I	AC	No	15.13.1, 15.13.15, 16.2.9		
Alcohol (C ₁₂ -C ₁₄) secondary poly(2-furazan)	V	S ⁰	2	2G	Cont	No				No	C	I	AC	No	15.13.1, 15.13.15, 16.2.6, 16.2.9		

New Ship Type requirements

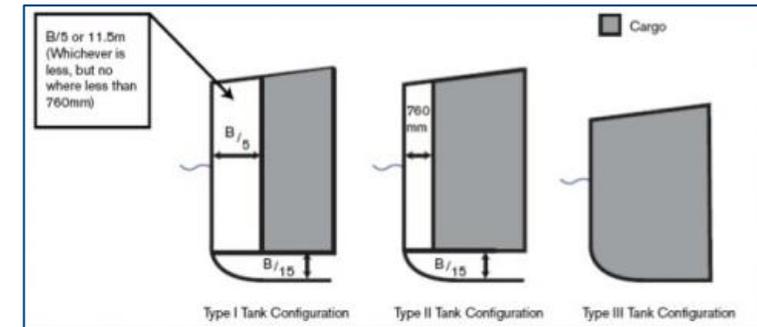
Following Products will change from ship type 3 to ship type 2:

- 1,1,1-Trichloroethane
- 1-Phenyl 1 xylyl ethane
- 2,2-Dichloropropionic acid
- 2,6-Diethylaniline
- 2-or 3 Chloropropionic acid
- 2-Methyl 5 ethyl pyridine
- Adiponitrile
- Calcium hydroxide slurry
- Dibutyl hydrogen phosphonate
- Dibutylamine
- Dimethyl succinate
- Dimethylpolysiloxane
- Dipentene
- Dodecylbenzene
- Ethyl amyl ketone
- Ethyl butyrate
- Ethyl tert butyl ether
- Ethyl -3 ethoxypropionate
- Ethylene glycol diacetate
- Ethylene cyanohydrin
- Fluorosilicic acid solution (20 30%)
- Heptene (all isomers)
- Hexanol
- Isoprene
- Latex, ammonia (1% or less) inhibited
- N-Amyl alcohol
- Nitropropane (60%)/Nitroethane (40%) mixture
- Nonanoic acid (all isomers)
- Octanoic acid (all isomers)
- Pentanoic acid
- Pentene (all isomers)
- Polyglycerin, sodium salt solution (containing less than 3% sodium hydroxide)
- Polyisobutenamine in aliphatic (C10 C14) solvent
- Polysiloxane
- Propionic anhydride
- Sulphuric acid
- Sulphuric acid, spent

New Ship Type requirements

Following Products will change from ship type 2 to ship type 1:

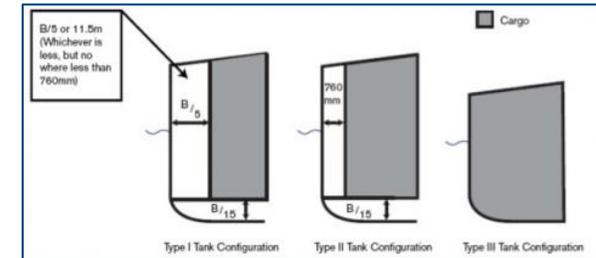
- Acetone cyanohydrin
- beta Propiolactone
- Carbon disulphide
- **Creosote (coal tar)**
- **Cresols (all isomers)**
- Crotonaldehyde
- Ethylene chlorohydrin
- Lactonitrile solution (80% or less)
- Nitrating acid (mixture of sulphuric and nitric acids)
- Propionitrile
- Sodium dichromate solution (70% or less)
- Trixylyl phosphate



New Ship Type requirements

Following Products will change from ship type 1 to ship type 2 or 3:

- 1,2,3-Trichlorobenzene (molten)
- 1,5,9-Cyclododecatriene
- 2,6-Di tert butylphenol
- Alkylaryl phosphate mixtures (more than 40% Diphenyl tolyl phosphate, less than 0.02% ortho isomers)
- Diphenylamine, reaction product with 2,2,4 Trimethylpentene
- Methylcyclopentadienyl manganese tricarbonyl
- N,N-Dimethyldodecylamine
- Tert-Dodecanethiol
- Tricresyl phosphate (containing 1% or more ortho isomer)



New Tank Type requirements

Following Products will change Tank type 2G to Tank type 1G:

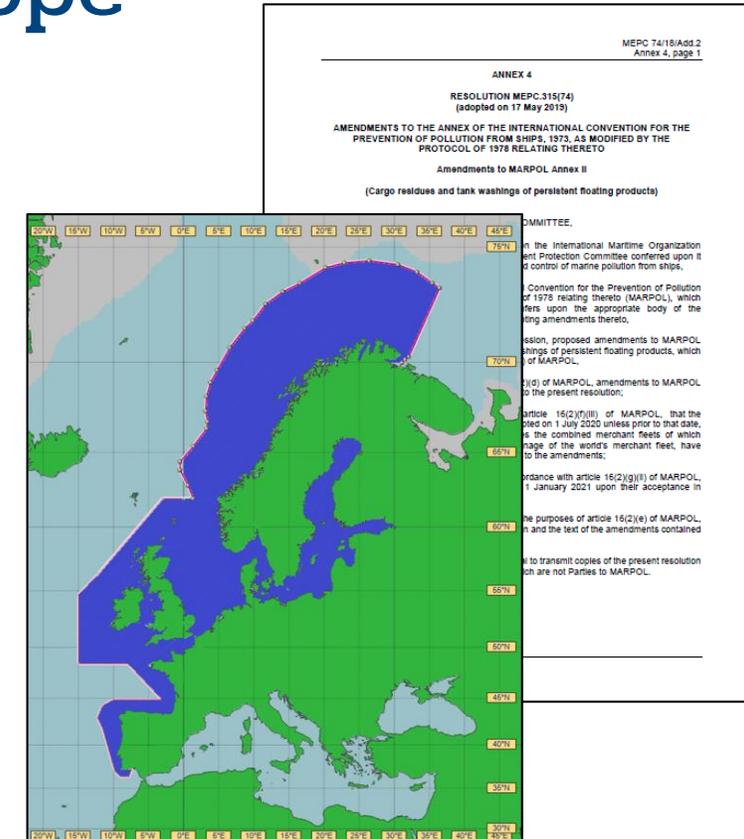
- Acetone cyanohydrin
- Crotonaldehyde
- Nitrating acid (mixture of sulphuric and nitric acids)
- Sodium dichromate solution (70% or less)

Following Products will change Tank type 1G to Tank type 2G:

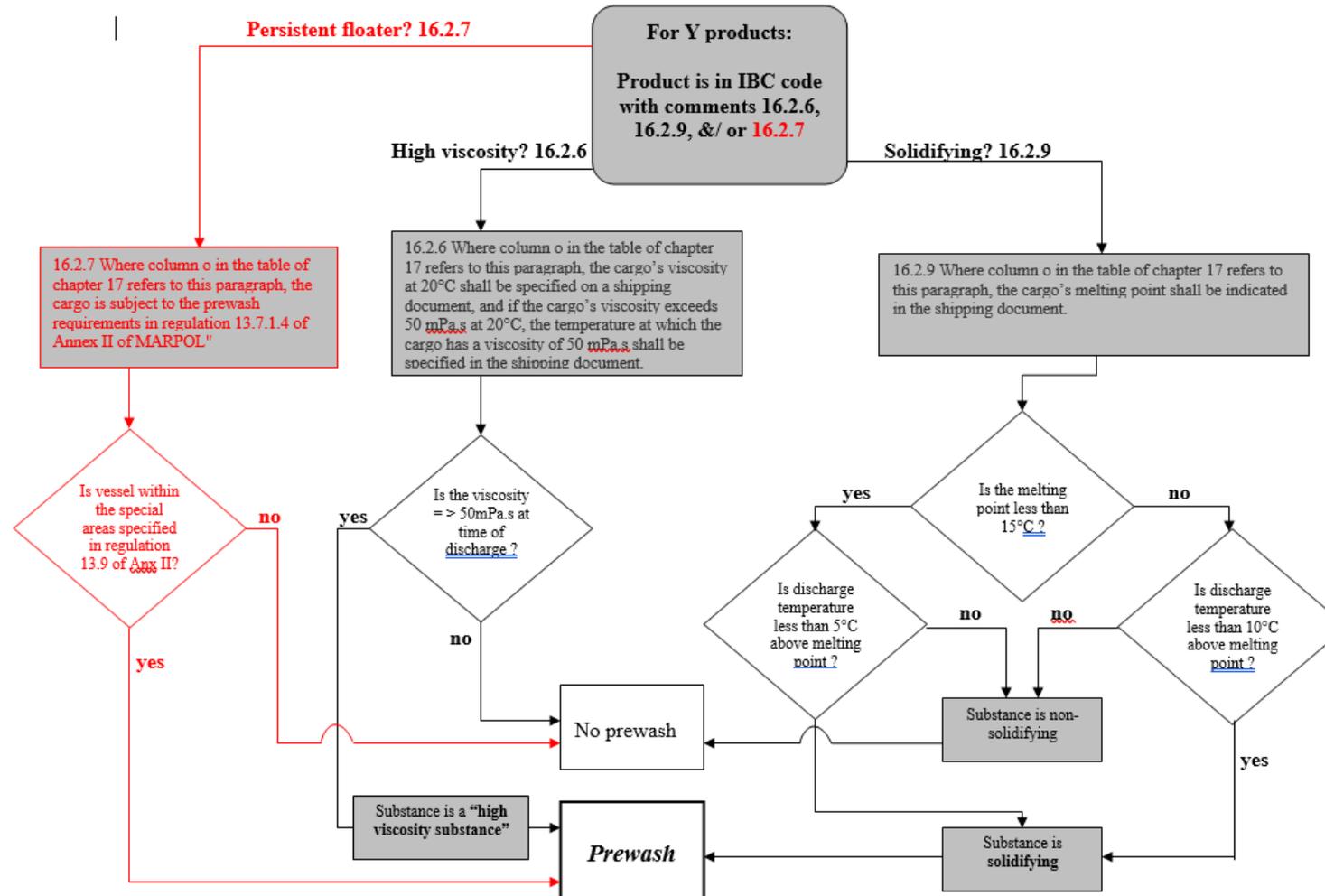
- Hexamethylene diisocyanate
- Methylcyclopentadienyl manganese tricarbonyl
- Vinyl ethyl ether

New prewash requirements – A new special area covering North West Europe

- Persistent floating products including Paraffin wax, Vegetable- and Animal oils will require prewash after discharge in North West Europe and Baltic Sea
- These products will be identified in Chapter 17 of the IBC Code with a new paragraph 16.2.7 in column “o”.
- Background for the new rule is that cargo residues has been washing up on ashore in Northern Europe and the Baltic
- IMO Reference: MEPC 74/18/Add.2 / Resolution MEPC.315(74)



New prewash requirements - A new special area covering North West Europe



New Classification of Waxes

Paraffin wax Pollution Category Y, Ship Type 2

Will be replaced by: **Paraffin wax, highly-refined** Pollution Category Y, Ship Type 2

Petrolatum Pollution Category Y, Ship Type 2

Will be replaced by: **Paraffin wax, semi-refined** Pollution Category X, Ship Type 2

Waxes Pollution Category Y, Ship Type 2

Will be replaced by: **Hydrocarbon wax** Pollution Category X, Ship Type 2

Energy Rich Fuels moved from Annex II to Annex I of MARPOL.

Following Product Names of “Energy rich Fuels” will be considered as Annex I cargoes starting 1 January 2021:

- Alkanes (C4-C12) linear, branched and cyclic (containing benzene up to 1%)
- Alkanes (C5-C7), linear and branched
- Alkanes (C9-C24) linear, branched and cyclic with a flashpoint ≤ 60 60°C
- Alkanes (C9-C24) linear, branched and cyclic with a flashpoint >60 60°C
- Alkanes (C10-C17), linear and branched
- Alkanes (C10-C26), linear and branched with a flashpoint ≤ 60 °C
- Alkanes (C10-C26), linear and branched with a flashpoint >60 °C

Note: Alkanes which are Tripartited and listed in list 2 and 3 of the MEPC list, will remain Annex II. In example Nexbase

Some common trade names for these products are:

- Renewable Naphtha
- Renewable Jet Fuel
- Renewable Diesel
- Green Diesel

Cargoes with new MARPOL Category

Following products changing MARPOL cat. Z to

Y:

- Benzene sulphonyl chloride
- Calcium hydroxide slurry
- Dodecylbenzene
- Dodecyl methacrylate
- 2,2,4-Trimethyl-1,3-pentanediol diisobutyrate

Following products changing MARPOL cat. Y to Z:

- Ethylene glycol
- Ethylene glycol (>85%)/sodium alkyl carboxylates mixture

Following product changing MARPOL cat. X to Y:

- N,N-Dimethyldodecylamine
- Dioctyl phthalate
- Isophorone diisocyanate

Following product changing MARPOL cat. Y to X:

- Crotonaldehyde



Thank you

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