

RESOLUTION MSC.29(61)
adopted on 11 December 1992
ADOPTION OF AMENDMENTS TO THE CODE FOR THE CONSTRUCTION
AND EQUIPMENT OF SHIPS CARRYING DANGEROUS
CHEMICALS IN BULK (BCH CODE)

ANNEX 5

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AND EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICALS
IN BULK (BCH CODE)

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO resolution A.212(VII), by which the Assembly, at its seventh session, adopted the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code), which provides safety requirements for chemical tankers supplementary to the provisions of the International Convention for the Safety of Life at Sea, 1974 (1974 SOLAS Convention), as amended,

RECALLING FURTHER resolution MSC.9(53), by which the Committee, at its fifty-third session, adopted the revised BCH Code,

NOTING resolution MEPC.56(33), by which the Marine Environment Protection Committee adopted, on 30 October 1992, amendments to the BCH Code in accordance with article 16(2)(d) of the International Convention for the Prevention of Pollution from Ships, as modified by the 1978 Protocol related thereto (MARPOL 73/78),

NOTING FURTHER resolution MSC.28(61), by which the Committee adopted amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code),

RECOGNIZING the need to bring the corresponding amendments to the BCH Code in force on the date on which the amendments to the IBC Code enter into force,

HAVING CONSIDERED, at its sixty-first session, amendments to the BCH Code proposed by the Sub-Committee on Bulk Chemicals,

1. ADOPTS amendments to the BCH Code, the text of which is given in the annex to the present resolution;
2. DETERMINES that the amendments shall become effective on 1 July 1994 upon their acceptance and entry into force of the corresponding amendments to the IBC Code adopted by resolution MSC.28(61).

ANNEX

AMENDMENTS TO THE BCH CODE

The existing text of the last sentence of 1.1 is amended by addition of the following words:

... of chapter 17 of the IBC Code.

The last two sentences of the existing text of 1.2.1 is amended to read as follows:

The Code is at present limited to the liquids shown in the summary of minimum requirements in chapter 17 of the IBC Code. Products that have been reviewed and determined not to present safety and pollution hazards to such an extent as to warrant application of the Code are found in chapter 18 of the IBC Code.

The existing text of 1.4.16A is replaced by the following:

Noxious liquid substance means any substance referred to in Appendix II of Annex II of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) or provisionally assessed under the provisions of regulation 3(4) of that Annex as falling into category A, B, C or D.

The following new 1.4.16C is added after the existing 1.4.16B:

The IBC Code means the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk adopted by the Maritime Safety Committee and the Marine Environment Protection Committee of the Organization by resolutions MSC.4(48) and MEPC.19(22) respectively, as amended.

The existing text of 3.16.10(a) is replaced by the following:

filter type respiratory protection is unacceptable;

The following words are inserted after the third sentence of the existing text of 4.7.21:

Remote manual operation should be arranged such that remote starting of pumps supplying the water spray system and remote operation of any normally closed valves in the system can be carried out from a suitable location outside the cargo area, adjacent to the accommodation spaces and readily accessible and operable in the event of fire in the areas protected.

The existing text of 4.10 is amended as follows:

4.10 Cargoes protected by additives

4.10.1 Certain cargoes with a reference in column 'm' in the table of chapter VI, by the nature of their chemical make-up, tend under certain conditions of temperature, exposure to air or contact with a catalyst, to undergo polymerization, decomposition, oxidation or other chemical changes. Mitigation of this tendency is carried out by introducing small amounts of chemical additives into the liquid cargo or by controlling the cargo tank environment.

4.10.2 No change.

4.10.3 Care should be taken to ensure that these cargoes are sufficiently protected to prevent deleterious chemical change at all times during the voyage. Ships carrying such cargoes should be provided with a certificate of protection from the manufacturer and kept during the voyage specifying:

- .1 the name and amount of additive present;
- .2 whether the additive is oxygen dependent;
- .3 date additive was put in the product and duration of effectiveness;
- .4 any temperature limitations qualifying the additives' effective lifetime; and
- .5 the action to be taken should the length of voyage exceed the effective lifetime of the additives.

4.10.4 Ships using the exclusion of air as the method of preventing oxidation of the cargo should comply with 2.19.3.

4.10.5 A product containing an oxygen dependent additive should be carried without inertion.

4.10.6 As existing 4.10.5.

4.10.7 As existing 4.10.6.

New 4.23 is added as follows:

4.23 Temperature sensors

Temperature sensors should be used to monitor the cargo pump temperature to detect overheating due to pump failures.

Chapter VI

The existing text of Chapter VI is replaced by the following:

CHAPTER VI - SUMMARY OF MINIMUM REQUIREMENTS

The summary of minimum requirements of the products covered by the Code is set out in chapter 17 of the IBC Code.

For the purpose of application of the minimum requirements under this Code, the cross references in the IBC Code shown in the left hand column of the following table should be taken to mean references to the BCH Code shown in the right hand column. Where a reference is made in the BCH Code to column "m" in the table of chapter VI it should be taken to mean any of the columns "m", "n" and "o" in the table of chapter 17 of the IBC Code.

IBC/BCH CODES CROSS REFERENCES TO THE REQUIREMENTS

<u>IBC Code chapter 17 items</u>	<u>IBC Code reference</u>	<u>BCH Code reference</u>
Ship type (column e)		
1 = ship type 1	(2.1.2)	(2.2.4(a))
2 = ship type 2	(2.1.2)	(2.2.4(b))
3 = ship type 3	(2.1.2)	(2.2.4(c))
Tank type (column f)		
1 = independent tank	(4.1.1)	(2.3.2)
2 = integral tank	(4.1.2)	(2.3.1)
G = gravity tank	(4.1.3)	(2.4)
P = pressure tank	(4.1.4)	-
Tank environmental control (column h)		
Inert: inerting	(9.1.2.1)	(2.19.2(a))
Pad: liquid or gas	(9.1.2.2)	(2.19.2(b))
Dry: drying	(9.1.2.3)	(2.19.2(c))
Vent: natural or forced	(9.1.2.4)	(2.19.2(d))

<u>IBC Code chapter 17 items</u>	<u>IBC Code reference</u>	<u>BCH Code reference</u>
Electrical equipment (column i)		
NF: non-flammable product	(10.1.6)	Standard electrical system
Yes: Flashpoint exceeding 60°C (closed cup)	(10.1.6)	Standard electrical system
No: Product having a flashpoint not exceeding 60°C (closed cup)	(10.1.6)	Special electrical systems
Gauging (column j)		
O: open gauging	(13.1.1.1)	Open device (3.9(a))
R: restricted gauging	(13.1.1.2)	Restricted device (3.9(b))
C: closed gauging	(13.1.1.3)	Closed device (3.9(c))
I: indirect gauging	(13.1.1.3)	Indirect device (3.9(d))
Materials and construction (column m)		
	N1	4.12.1
	N2	4.12.2
	N3	4.12.3
	N4	4.12.4
	N5	4.12.5
	N6	4.12.8
	N7	4.12.9
	N8	4.12.1, except copper and copper alloys may be used
	Z	-
	Y1	4.12.6
	Y2	4.12.7(a)
	Y3	4.12.7(b)
	Y4	4.12.10
	Y5	4.12.6 except aluminium is not permitted
Respiratory and eye protection (column n)		
	E: see 14.2.8	3.16.10

<u>IBC Code chapter 17 items</u>	<u>IBC Code reference</u>	<u>BCH Code reference</u>
Special requirements (column o)	15.1	4.4
	15.2	4.19
	15.3	4.1
	15.4	4.2
	15.5.1 - 13	4.20.1 - 14
	15.5.14 - 26	4.20.15 - 27
	15.6	4.6
	15.7	4.5
	15.8	4.7
	15.9	4.21
	15.10	4.3
	15.11	4.8
	15.12	4.9
	15.13	4.10
	15.14	4.11
	15.16	4.15
	15.17	4.13.1
	15.18	4.13.2
	15.19	4.14
	15.19.6	4.14.1
	15.20	4.22
	15.21	4.23
	16.2.6	5.2.5
	16.2.7	5.2.6
	16.2.8	5.2.7
	16.2.9	5.2.8
	16.6	4.18
	16A.2.2	5A.2.2

Chapter VII

The existing text of Chapter VII is replaced by the following:

CHAPTER VII. - LIST OF CHEMICALS TO WHICH THE CODE DOES NOT APPLY

The list of chemicals which have been reviewed for their safety and pollution hazards and determined not to present hazards to such an extent as to warrant the application of the Code is set out in chapter 18 of the IBC Code.

New chapter VIII is added as follows:

CHAPTER VIII - TRANSPORT OF LIQUID CHEMICAL WASTES

8.1 Preamble

- 8.1.1 Maritime transport of liquid chemical wastes could present a threat to human health and to the environment.
- 8.1.2 Liquid chemical wastes should, therefore, be transported in accordance with relevant international conventions and recommendations and, in particular, where it concerns maritime transport in bulk, with the requirements of this Code.

8.2 Definitions

For the purpose of this chapter:

- 8.2.1 "Liquid chemical wastes" are substances, solutions or mixtures, offered for shipment, containing or contaminated with one or more constituents which are subject to the requirements of this Code and for which no direct use is envisaged but which are carried for dumping, incineration or other methods of disposal other than at sea.
- 8.2.2 "Transboundary movement" means maritime transport of wastes from an area under the national jurisdiction of one country to or through an area under the national jurisdiction of another country, or to or through an area not under the national jurisdiction of any country, provided at least two countries are concerned by the movement.

8.3 Applicability

- 8.3.1 The requirements of this chapter are applicable to the transboundary movement of liquid chemical wastes in bulk by seagoing ships and should be considered in conjunction with all other requirements of this Code.
- 8.3.2 The requirements of this chapter do not apply to:
 - .1 wastes derived from shipboard operations which are covered by the requirements of MARPOL 73/78;
 - .2 liquid chemical wastes carried by ships engaged in the incineration of such wastes at sea which are covered by chapter 19 of the IBC Code; and
 - .3 substances, solutions or mixtures containing or contaminated with radioactive materials which are subject to the applicable requirements for radioactive materials.

8.4 Permitted shipments

8.4.1 Transboundary movement of wastes is permitted to commence only when:

- .1 notification has been sent by the competent authority of the country of origin, or by the generator or exporter through the channel of the competent authority of the country of origin, to the country of final destination; and
- .2 the competent authority of the country of origin, having received the written consent of the country of final destination stating that the wastes will be safely incinerated or treated by other methods of disposal, has given authorization to the movement.

8.5 Documentation

8.5.1 In addition to the documentation specified in 5.2 of this Code ships engaged in transboundary movement of liquid chemical wastes should carry on board a waste movement document issued by the competent authority of the country of origin.

8.6 Classification of liquid chemical wastes

8.6.1 For the purpose of the protection of the marine environment all liquid chemical wastes transported in bulk should be treated as Category A noxious liquid substances, irrespective of the actual evaluated category.

8.7 Carriage and handling of liquid chemical wastes

8.7.1 Liquid chemical wastes should be carried in ships and cargo tanks in accordance with the minimum requirements for liquid chemical wastes specified in chapter 17 of the IBC Code, unless there are clear grounds indicating that the hazards of the wastes would warrant:

- .1 carriage in accordance with the ship type 1 requirements; or
- .2 any additional requirements of this Code applicable to the substance or, in case of a mixture, its constituent presenting the predominant hazard.

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