

Subject

Revisions of guidance for IMSBC Code fitness certificate

ClassNK

Technical Information

No. TEC-0936

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To whom it may concern

This is to notify that the guidance for IMSBC Code fitness certificate was revised due to amendments of IMSBC Code. This Technical Information supersedes ClassNK Technical Information No. TEC-0772 issued on 21 May 2009.

Please note that in this information, "IMSBC Code (2009 Edition)" means present International Maritime Solid Bulk Cargoes Code and "IMSBC Code (2012 Edition)" means revised International Maritime Solid Bulk Cargoes Code.

The revisions are summarized as follows.

1. Amendments of IMSBC Code

The revised IMSBC Code (IMSBC Code (2012 Edition)) was adopted by IMO Maritime Safety Committee 89th session (MSC89) and it includes amendments for individual schedules of each cargo.

IMSBC Code (2012 Edition) is going to enter into force on 1 January 2013 and is mandatory for all ships that load solid bulk cargoes.

2. Guidance for IMSBC Code fitness certificate

Please refer to the attachment, "Guidance for IMSBC Code fitness certificate".

3. Cargoes for which construction and equipment requirements are amended

Please note that there are additional requirements for construction and equipment for some cargoes in IMSBC Code (2012 Edition). Please refer to "Table G1, Cargoes for which construction/equipment requirements are newly added" for the cargoes for which the requirements are added in this amendments.

(To be continued)

NOTES:

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4. WOOD PRODUCTS - GENERAL

WOOD PRODUCTS - GENERAL, listed in Table G1, includes LOGS, PULP WOOD, TIMBER, ROUNDWOOD and SAW LOGS. As those cargoes are listed in "Table 1, LIST OF SOLID BULK CARGOES FOR WHICH A FIXED GAS FIRE-EXTINGUISHING SYSTEM MAY BE EXEMPTED" of MSC.1/Circ. 1395 (Superseding of MSC/Circ. 1146, please refer to the attachment), those cargoes may be loaded in the ship which is exempted from a Fixed Gas Fire-extinguishing system. If the exemption certificate does not include the cargoes, it is necessary to revise the certificate.

5. Revision of the exemption certificate for Fixed Gas Fire-extinguishing system

As above Paragraph 4, it is necessary to revise the exemption certificate in some cases.

- (1) In case where a full term exemption certificate is issued by Class NK or in case where Panamanian and Liberian flag ships, the procedures to revise the exemption certificate are prescribed in the following (i) or (ii).

In case of Panamanian flag ships, it is necessary for shipowner or management company to apply for the full term exemption certificate to Panama Maritime Authority directly after ClassNK issues an interim exemption certificate.

In case of Liberian flag vessels, ClassNK applies for the full term exemption certificate to Liberian Government after the issuance of interim exemption certificate.

- (i) In case where survey is conducted*

Please submit application for the exemption certificate to ClassNK service site. (Please also submit application for the IMSBC Code fitness certificate if necessary)

- (ii) In case where survey is not conducted*

Please submit application for the exemption certificate to Material and Equipment Department (EQD) of ClassNK. (Please also submit application for the IMSBC Code fitness certificate if necessary)

*: "In case where survey is conducted" means the case that survey is conducted for issuance of the IMSBC Code fitness certificate adding "WOOD PRODUCTS - GENERAL". "In case where survey is not conducted" means the case except shown in preceding sentence.

- (2) In case where a full term exemption certificate is issued by the flag authorities except Panamanian and Liberian Governments, it is necessary for shipowner or management company to apply for the exemption certificate to those authorities directly.

6. IMSBC Code fitness certificate including WOODCHIPS and WOOD PELLETS

As shown in "Table G1, Cargoes for which construction and equipment requirements are newly added", additional two sets Self Contained Breathing Apparatuses (SCBAs) with 200% spare cylinders should be provided onboard in case where the IMSBC Code fitness certificates include WOODCHIPS and WOOD PELLETS and the ship keeps on loading those cargoes on or after 1 January 2013. Please install the SCBAs by 31 December 2012 if the ship was not installed with additional SCBAs. ClassNK surveyors will confirm the installation of additional SCBAs at the first periodical survey on or after 1 January 2013.

(To be continued)

7. How to deal with the existing IMSBC Code fitness certificate on or after 1 January 2013

The existing IMSBC Code fitness certificates which was issued in accordance with IMSBC Code (2009) is considered as follows.

- (1) There is no revision of construction and equipment requirements for the cargoes other than those listed in Table G1. As a result, the existing IMSBC Code fitness certificate only for the cargoes other than those listed in Table G1 can be effective beyond 1 January 2013 and it is not necessary to revise the certificate.
- (2) There is no construction and equipment requirements for Group A and Group C cargoes listed in Table G1. Therefore, those cargoes are treated as cargoes included in "All materials of Group A and Group C" listed in the existing IMSBC Code fitness certificate. As a result, the existing IMSBC Code fitness certificate can be effective for Group A and Group C cargoes listed in Table G1 beyond 1 January 2013 in case where it includes "All materials of Group A and Group C", and it is not necessary to revise the certificate.
- (3) It is newly required to provide additional Self Contained Breathing Apparatuses (SCBAs) for WOODCHIPS and WOOD PELLETS. (Please refer to Table G1.) Subsequently, the existing IMSBC Code fitness certificate can be effective for WOODCHIPS and/or WOOD PELLETS beyond 1 January 2013 in only case where the required SCBAs is provided onboard. And it is not necessary to revise the certificate.

For any questions about the above, please contact:

[IMSBC Code fitness certificate and related questions]

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[For questions on Exemption certificate from Fixed Gas Fire-extinguishing system]

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Attachment:

1. Table G1, Cargoes for which construction and equipment requirements are newly added
2. Guidance for IMSBC Code fitness certificate
3. "Table 1, LIST OF SOLID BULK CARGOES FOR WHICH A FIXED GAS FIRE-EXTINGUISHING SYSTEM MAY BE EXEMPTED" of MSC.1/Circ. 1395

Table G1 –Cargoes for which requirements on construction/equipment are added.

Additional requirements are shown in red.

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v
MATERIALS	IMO class	UN No.	Group	Stowage	NO SMOKING sign	Ventilation	SCBA	Protective clothing	Bilge line	Explosion protected electrical equipment	Dual purpose nozzles	4 jets of water	SOLAS Reg.II-2/54.2 or 19.3								FFEA (SOLAS Reg.II-2/10.7.1.3)
													Remote control of fire pump	4 jets of water	Explosion protected electrical equipment	Mechanical ventilation	Safe type fan	Natural ventilation	Personnel protection	A-60 insulation	
DISTILLERS DRIED GRAINS WITH SOLUBLES			C																		
FERROUS SULPHATE HEPTAHYDRATE			C																		
FLY ASH, DRY			C																		
FLY ASH, WET			A																		
GRANULAR FERROUS SULPHATE			C																		
MAGNESIUM SULPHATE FERTILIZERS			C																		
WOODCHIPS	MHB		B				Yes														Yes ⁷
WOOD PELLETS	MHB		B				Yes														Yes
WOOD PRODUCTS - GENERAL	MHB		B			Nm	Yes														
WOOD PULP PELLETS	MHB		B																		Yes ⁷

Guidance for IMSBC Code fitness certificate

0101 General

Under the IMSBC Code, materials are classified into those likely to liquefy (Group A), those having chemical hazard (Group B) and others (Group C). In this guidance, they are referred to as “Group A cargoes”, “Group B cargoes” and “Group C cargoes” respectively.

0102 Requirements for construction and equipment

- 1. A loading manual and a stability information booklet are required to be provided onboard regardless of the types of cargoes intended to be carried.
- 2. No special construction and equipment is required for the carriage of Group A and C cargoes except that specially designed portable divisions or permanent structural boundaries to confine any shift of cargo to an acceptable limit are required for the carriage of Group A cargoes without appropriate restrictions on their moisture contents.
- 3. For the carriage of Group B cargoes, ships are to comply with the requirements for special construction and/or equipment specified in IMSBC Code. The requirements for the carriage of Group B cargoes except coal and brown coal (lignite) briquettes are summarized in Table 1.1 and 1.2. The requirements for the carriage of coal and brown coal (lignite) briquettes are shown in Table 1.3.

Note 2.1: The Code provides special requirements for construction and equipment for fire protection and personnel protection as well as operational precautions and information on properties of each material.

Note 2.2: The applications of the requirements of SOLAS74 Reg.II-2/53 and 54 for carriage of dangerous goods (Reg.II-2/10.7 and 19 under SOLAS2000) are also shown in Table 1.1 for convenience sake.

0103 Application

- 1. Applicant, the ship owner or their representative, or the shipbuilder, should submit an application containing the information on the items listed below to the ClassNK local office or Material and Equipment Department (EQD) prior to the survey onboard the ship.
 - (1) List of cargoes to be included in the IMSBC Code fitness certificate
 - (2) In case where a survey onboard the ship is required, expected date and place of the survey and local agent to be contacted
 - (3) A list of documents submitted together with the application and of those expected to be submitted later, if any.
- 2. In case where dangerous goods are included in the cargoes, the applicant should also apply for the issue of a certificate of compliance with the requirements of SOLAS74 Reg.II-2/54 (Reg.II-2/19 under SOLAS2000) as necessary.
- 3. In case where a conversion or an alteration affecting a class requirement including the case mentioned in -2 above is made, the applicant should also apply for a class survey.

0104 Submission of documents

- 1. In case where the certification is requested for the carriage of Group B cargoes, the applicant should submit the documents as shown in Table 1.4 (other than coal and brown coal (lignite) briquettes) and/or Table 1.5 (coal and brown coal (lignite) briquettes) to the ClassNK local office or EQD. For the specific construction and equipment of existing ship, if the ship's compliance with the requirements, in the opinion of the surveyor, is capable of being checked by the survey on board. Submission of documents and document examination may be omitted.
- 2. In case where the certification is requested for the carriage of Group A cargoes without appropriate restrictions on their moisture contents, the applicant should submit relevant structural drawings, stability calculations and other documents considered necessary by ClassNK to EQD.

0105 Document examination, survey and issue of certificate

- 1. Certification for cargoes other than Group B cargoes
 - (1) For certification for the carriage of cargoes other than Group B cargoes, the document examination is not required, in principle. The ClassNK local office can issue a certificate and/or checklist.
 - (a) In case where any Group A cargo is intended to be carried without appropriate restrictions on its moisture content, the examination of drawings of subdivision is required at EQD.
 - (b) Even if the ship is less than 100 meters in length (even if the ship is less than 65 meters in length, if its building contract was placed on or after 1 July 1998), the ClassNK local office will check that an appropriate loading manual containing information on allowable nominal specific gravity of cargo for each hold and longitudinal strength of the ship is provided onboard the ship.
- 2. For certification for the carriage of cargoes including only coal and/or brown coal (lignite) briquettes as Group B cargo, (1) and (2) below should be followed.
 - (1) Document examination at EQD is not required. The ClassNK local office issues a certificate and checklist.
 - (2) Based on the results of examination into the documents listed in Table 1.5, the ClassNK local office carries out a survey on board and issues a certificate.
- 3. For certification for the carriage of cargoes including Group B cargoes (except where Group B cargo is only coal and/or brown coal (lignite) briquettes), (1) and (2) below should be followed.
 - (1) Document examination at EQD is required. Based on the results of examination into the documents listed in Table 1.4, EQD instructs Class NK local office.
 - (2) The ClassNK local office carries out a survey on board and issues a certificate in accordance with instruction from EQD.
- 4. The surveyor will confirm that the ship which has already had IMSBC Code fitness certificate complies with following (1) and (2) at the ship's first periodical survey on or after 1 January 2013.
 - (1) IMSBC Code fitness certificate including WOODCHIPS, WOOD PELLETS and WOOD PRODUCTS – GENERAL
When the ship has IMSBC Code fitness certificate including WOODCHIPS, WOOD PELLETS and WOOD PRODUCTS – GENERAL, surveyor will confirm the ship complies with the requirements listed in Table G1.
 - (2) IMSBC Code fitness certificate including WOOD PULP PELLETS
WOOD PULP PELLETS will be deleted from IMSBC Code fitness certificate because the cargo is deleted under IMSBC Code (2012 Edition).

Table 1.1

[illegible]

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v
MATERIALS	IMO class	UN No.	Group	Stowage	NO SMOKING sign	Ventilation	SCBA	Protective clothing	Bilge line	Explosion protected electrical equipment	Dual purpose nozzles	4 jets of water	SOLAS Reg.II-2/54.2 or 19.3								FFEA (SOLAS Reg.II-2/10.7.1.3)
													Remote control of fire pump	4 jets of water	Explosion protected electrical equipment	Mechanical ventilation	Safe type fan	Natural ventilation	Personnel protection	A-60 insulation	
CHOPPED RUBBER AND PLASTIC INSULATION			C																		Yes ²
CHROME PELLETS			C																		
CHROMITE ORE			C																		
CLAY			C																		
COAL	MHB		A and B																		
COAL SLURRY			A			N															
COARSE CHOPPED TYRES			C																		Yes ²
COKE			C																		
COKE BREEZE			A																		
COLEMANITE			C																		
COPPER CONCENTRATE			A																		
COPPER GRANULES			C																		
COPPER MATTE			C																		
COPRA (dry)	4.2	1363	B	A	Yes	Nm							X	X				X	X	X	Yes
CRYOLITE			C																		
DIAMMONIUM PHOSPHATE (D.A.P.)			C																		
DIRECT REDUCED IRON, (A) Briquettes, hot-moulded	MHB		B	F	Yes	Nm, Sp				IICT2											
DIRECT REDUCED IRON, (B) Lumps, pellets, cold moulded briquettes 3	MHB		B	F	Yes					IICT2											Yes
DIRECT REDUCED IRON, (C) (By product fines) 3	MHB		B	F	Yes		Yes			IICT2											Yes
DOLOMITE			C																		
DISTILLERS DRIED GRAINS WITH SOLUBLES			C																		
FELSPAR LUMP			C																		
FERROCHROME			C																		
FERROCHROME, exothermic			C																		
FERROMANGANESE			C																		
FERRONICKEL			C																		
FERROPHOSPHORUS (including briquettes)	MHB		B			ML, Sa	Yes			IICT1											
FERROSILICON with 30% or more but less than 90% silicon (including briquettes)	4.3	1408	B	A, G	Yes	ML,Sa	Yes	Yes	F,N	IICT1					X	X	X	X	X	X	
FERROSILICON 25% to 30% silicon, or 90% or more with silicon (including briquettes)	MHB		B	G	Yes	ML,Sa	Yes		F,N	IICT1											
FERROUS METAL BORINGS, SHAVINGS, TURNINGS or	4.2	2793	B	A	Yes		Yes						X	X				X	X	X	Yes

[illegible]

[illegible]

[illegible]

The contents of each column in the Table 2.1 are as follows.

1. MATERIALS (column “a”)

Bulk Cargo Shipping Names are expressed in capital letters and identifies a bulk cargo during transport by sea.

2. IMO class (column “b”)

Group B cargoes are categorized into the following classes.

Class 4.1 : Flammable solids

Class 4.2 : Substances liable to spontaneous combustion

Class 4.3 : Substances which, in contact with water, emit flammable gases

Class 5.1 : Oxidizing substances (agents)

Class 7 : Radioactive materials

Class 9 : Miscellaneous dangerous substances and articles

MHB : Materials which may possess chemical hazards when transported in bulk other than materials classified as dangerous goods in the IMDG Code.

3. UN No. (column “c”)

This is a 4-digit number assigned to a particular dangerous substance included in the dangerous substance list (approximately 3,000 items) within the United Nations Recommendations on the Transport of Dangerous Goods issued by the United Nations Committee of Experts on the Transport of Dangerous Goods.

4. Group (column “d”)

A : Group A consists of cargoes which may liquefy if shipped at moisture content in excess of their transportable moisture limit.

B : Group B consists of cargoes which possess a chemical hazard which could give rise to a dangerous situation on a ship.

C : Group C consists of cargoes which are neither liable to liquefy (Group A) nor to possess chemical hazards (Group B).

5. Stowage (column “e”)

A : Bulkheads to the engine room are to be insulated to A-60 standard.

F : Boundaries of components are to be resistant to fire and passage of water.

G : Bulkheads to the engine room are to be of gastight.

6. NO SMOKING sign (column “f”)

Yes : “NO SMOKING” signs are to be posted on decks and in areas adjacent to cargo compartments.

7. Ventilation (column “g”)

N : Natural ventilation system is to be provided for cargo holds.

Nm : Natural or mechanical ventilation system is to be provided for cargo holds.

M : Mechanical ventilation system is to be provided for cargo holds.

ML : At least two mechanical ventilation fans are to be provided for cargo holds. The total ventilation is to be at least six air changes per hour. Ventilation openings are to comply with the requirements of the Load Line Convention as amended for openings not fitted with means of closure.

Sa : Ventilation fans are to be safe for use in a flammable atmosphere.

Sp : Spark-arresting screens (wire mesh guards with max. 13mm X 13mm) are to be fitted to ventilation openings.

8. SCBA (column “h”)

Yes : Two self contained breathing apparatuses with 200% spare cylinders are to be additionally provided.

9. Protective clothing resistant to chemical attack (column “i”)

Yes : Four sets of protective clothing which consists of a pair of gloves, boots, a protective clothing and helmet with goggles are to be additionally provided.

10. Bilge line (column “j”)

F : In case where bilge lines are led to machinery space, bilge line is to be isolated either by fitting a blank flange or by a closed lockable valve.

N : A notice is to be placed adjacent to the valve warning against opening without the master's permission.

11. Electrical equipment (column "k")

Not suitable explosion protected type electrical equipment are to be disconnected (by removal of links in the system, other than fuses) from the power source at a point external to the space.

IIAT2: Electrical equipment having an explosion protection grade of IIAT2 or upwards are considered as suitable explosion protected type electrical equipment.

IIAT3: Electrical equipment having an explosion protection grade of IIAT3 or upwards are considered as suitable explosion protected type electrical equipment.

IIAT4: Electrical equipment having an explosion protection grade of IIAT4 or upwards are considered as suitable explosion protected type electrical equipment.

IICT1: Electrical equipment having an explosion protection grade of IICT1 or upwards are considered as suitable explosion protected type electrical equipment.

IICT2: Electrical equipment having an explosion protection grade of IICT2 or upwards are considered as suitable explosion protected type electrical equipment.

IS: Intrinsically safe type electrical equipment are considered as suitable explosion protected type electrical equipment.

12. Dual purpose nozzles (column "l")

Yes : Nozzles provided with fire hoses are to be of dual-purpose type (i.e., spray/jet type).

13. 4 jets of water (column "m")

Yes : The quantity of water delivered is to be capable of supplying four nozzles at pressure as specified in SOLAS regulation and being trained on any part of the cargo space when empty.

14. Requirements of SOLAS Reg.II-2/54.2 (Reg.II-2/19.3 on or after 2000 amendments) (column "n" ~ "u")

X : Applicable.

15. FFEA (SOLAS Reg.II-2/10.7.1.3) (column "v")

Yes : Fixed CO₂ fire extinguishing system for cargo holds are required by SOLAS Reg.II-2/10.7.1.3.

(Yes): Fixed gas fire-extinguishing system is ineffective and for which a fixed fire-extinguishing system giving equivalent protection shall be available. According to the Unified Interpretation of IMO, water supplies defined in SOLAS Reg.II-2/19.3.1.2 are considered as the alternative of a fixed gas fire-extinguishing system in cargo spaces.

General notes:

- For the detailed requirements of the IMSBC Code, the relevant part of the Code should be referred to.
- The application of the requirements of SOLAS Reg.II-2/54.2 or 19.3 is shown just for ready reference. For the detailed requirements, the relevant part of the SOLAS should be referred to.
- Blank columns mean "Not applicable".

- Notes :
1. CASTER MEAL, CASTER POMACE and CASTER FLAKE shall not be carried in bulk.
 2. For the planned voyage not exceeding 5 days from the commencement of loading to the completion of discharge, the vessel may be exempted from the requirements of FFEA.
 3. Consideration shall be given to providing the vessel with the means to top up the cargo spaces with additional supplies of inert gas taking into account the duration of the voyage. The ship's fixed CO₂ fire extinguishing system shall not be used for this purpose.
 4. Only applicable to Industrial sand coated with resin.
 5. Only applicable to Seedcake containing solvent extractions only.
 6. Fine grained sulphur (flowers of sulphur) shall not be transported in bulk.
 7. With moisture content of 15% or more, the vessel may be exempted from the requirements of FFEA.
 8. Only suitable wire mesh guards are required.

Table 1.2

IMSBC Code - Initial Checklist
(for cargoes other than COAL and BROWN COAL BRIQUETTES)

Column of Table 2.1	Requirements	Result
e	Stowage: ☐ Bulkheads to the engine room are to be insulated to A-60 standard. ☐ Boundaries of components are to be resistant to fire and passage of water. ☐ Bulkheads to the engine room are to be of gastight.	☐
f	NO SMOKING sign: ☐ "NO SMOKING" signs are to be posted on decks and in areas adjacent to cargo compartment.	☐
g	Ventilation: ☐ Natural ventilation systems are to be provided for cargo holds. ☐ Natural or mechanical ventilation systems are to be provided for cargo holds. ☐ Mechanical ventilation systems are to be provided for cargo holds. ☐ At least two mechanical ventilation fans are to be provided for cargo holds. The total ventilation are to be at least six air changes per hour. Ventilation openings are to comply with the requirements of the Load Line Convention as amended for openings not fitted with means of closure. ☐ Ventilation fans are to be safe for use in a flammable atmosphere. ☐ Spark-arresting screens (wire mesh guards with max. 13mm×13mm) are to be fitted to ventilation openings.	☐
h	SCBA: ☐ Two self contained breathing apparatuses with 200% spare cylinders are to be additionally provided.	☐
i	Protective clothing resistant to chemical attack: ☐ Four sets of protective clothing which consists of boots, gloves, coverall and headgear are to be additionally provided.	☐
j	Bilge line: ☐ In case where bilge lines are led to machinery space, bilge lines are to be isolated either by fitting a blank flange or by a closed lockable valve. ☐ A notice is to be placed adjacent to the valve warning against opening without the master's permission.	☐
k	Electrical equipment: ☐ Electrical equipment fitted in the cargo holds, including motors of mechanical ventilation systems, are to be of safe type having an explosion protection grade/type stated below or upwards. Not suitable explosion protected type electrical equipment are to be capable of being positively isolated from outside of the spaces. (☐ IIAT2 / ☐ IIAT3 / ☐ IIAT4 / ☐ IICT1 / ☐ IICT2 / ☐ IICT3 / ☐ IICT4 / ☐ Intrinsically safe type)	☐
l	Dual purpose nozzles ☐ Nozzles provided with fire hoses are to be of dual-purpose type (i.e., spray/jet type).	☐
m	4 jets of water ☐ The quantity of water delivered is to be capable of supplying four nozzles at pressure as specified in SOLAS regulation and being trained on any part of the cargo space when empty.	☐

Note: 1. The requirements checked are applied to the vessel.
2. The results of confirmation survey on board have been shown in the right columns. For the requirements complied with, the columns should be checked. For the requirements not applied, "NA" should be entered in the columns.

Ship's name :
Class number :
Date :

Signature:

Table 1.3

**IMSBC Code - Initial Checklist
(for COAL and BROWN COAL BRIQUETTES)**

1	Boundaries of cargo spaces are to be resistant to fire and liquids.	☐
2	Electrical equipment fitted in the cargo holds are to be of safe type having an explosion protection grade of IIAT4 or upwards. Not suitable explosion protected type electrical equipment are to be capable of being positively isolated from outside of the spaces and have the enclosure having a protection degree of IP55 or upwards, and caution plates to ensure isolation of electrical equipment are to be provided.	☐
3	Suitable means for measuring following gases, etc. in cargo spaces without entry into such spaces are to be provided. Methane Oxygen Carbon monoxide pH value Temperature(0 - 100°C)	☐
4(*)	Two sets of self-contained breathing apparatus are to be provided. (Note: The apparatus required by SOLAS Reg.II-2/17(00E) or Reg.II-2/10(00N) may be used for this purpose)	☐
5	"No Smoking" signs are to be posted in conspicuous places.	☐
6(*)	Natural ventilation system is to be provided for cargo spaces and air holes should be provided at the upper part of web plates of longitudinal and transverse girders fitted to deck plates with appropriate spacing. Note: Air holes should not be located at any part that may be subject to stress concentration.	☐
7	Natural or mechanical ventilation systems are to be provided for adjacent enclosed working spaces, such as store rooms, carpenter's shops, passage ways, tunnels. In the case of mechanical ventilation, only the equipment which is safe type for use in an explosive atmosphere can be used in cargo area.	☐
8	Two sampling holes per hold, one on the port side and one on the starboard side of the hatch cover or upper parts of hatch coamings are to be provided with threaded stub and sealing cap.	☐

Note: 1. The items marked with (*) are not applicable to brown coal (lignite) briquettes.
2. The results of confirmation survey on board have been shown in the right columns. For the requirements complied with, the columns should be checked. For the requirements not applied, "NA" should be entered in the columns.

Ship's name :

Class number :

Date :

Signature:

Table 1.4

Documents/information to be submitted

Required items (1) Column of Table 2.2 (2) Regulation of SOLAS II-2/54 (II-2/19)			Documents/information to be submitted The meanings of “H” and “L” are specified under this table.	
(1)	(2)			
e	2.8 (3.8)	“A-60” class insulation of bulkheads between the cargo space and engine room	H	Drawings of fire protection construction Type and manufacture of the material
f	--	“NO SMOKING” signs	L	Number and locations of the signs
g	--	Natural ventilation.	H	Drawings of the system
	2.4.3 (3.4.3)	Natural or mechanical ventilation.		
	--	Mechanical ventilation	H	Drawings of the system Calculations of the air changes
	2.4.1 (3.4.1)	Mechanical ventilation (total ventilation at least six air changes per hour)		
	2.4.2 (3.4.2)	Non-sparking fans	L	Specifications
h	2.6.2 (3.6.2)	Self-contained breathing apparatus	L	Type, manufacturer and specifications
	2.6.1 (3.6.1)	Protective clothing resistant to chemicals		
j	--	Stop valves and blank flanges on the bilge lines on machinery space side	H	Drawing of bilge lines
k	2.2 (3.2)	Electrical equipment to be of safe type.	H	Arrangement and wiring diagram of electrical equipment fitted in the space including grade of each equipment, such as IAT4.
l	-	Jet/spray dual purpose type nozzle	L	Type, manufacturer and specifications
m	2.1.2 (3.1.2)	Capacity of fire pumps to supply four nozzles	H	Fire main piping diagram with arrangement of hydrant and pump capacity.

H: To be submitted to Material and Equipment department for examination by the Head office.

L: To be submitted to the local office for their checking.

Table 1.5

Documents/information to be submitted for COAL/BROWN COAL BRIQUETTES

Requirements on Table 2.3	Documents/information to be submitted The meaning of “L” is specified under this table	
Boundaries of cargo spaces should be resistant to fire and liquids.	—	—
Electrical cables and components situated in cargo spaces and adjacent spaces should be free from defects and safe for use in explosive atmosphere or positively isolated.	L	Arrangement and wiring diagram of electrical equipment fitted in the space including grade of each equipment, such as IIAT4.
Appropriate instruments for measuring followings into cargo spaces without entry into such spaces should be provided. Methane Oxygen Carbon monoxide pH value Temperature(0 - 100°C)	L	Type, manufacturer and specifications
Two sets of self-contained breathing apparatus to be provided.	L	Type, manufacturer and specifications
“No Smoking” sign and “No naked flames” sign should be posted in conspicuous places.	L	Number and locations of the signs
Natural surface ventilation should be provided for cargo spaces.	L	Drawings of the ventilation systems Arrangement of air holes
Natural or mechanical ventilation should be provided for enclosed working spaces, such as store rooms, carpenter's shops, passage ways, tunnels. Mechanical ventilation, if used, should be of safe type for use in explosive atmosphere.	L	Drawings of the system
Two sampling holes per hold, one on each side of the hatch cover should be provided with threaded stub and sealing cap.	L	Drawings of the system

L: To be submitted to the local office for their checking.

Appendix 1.1 - Form of certificate

Certificate of Compliance with the International Maritime Solid Bulk Cargoes (IMSBC) Code

No. (*certificate number*)

Name of ship :
Distinctive number or letters :
Port of registry :
Gross tonnage :
Class number :
IMO number : IMO

This is to certify that the ship is suitable for the carriage in bulk of all cargoes listed in Attachment 1 in the cargo holds stated in accordance with the provisions of the International Maritime Solid Bulk Cargoes Code provided that:

1. the relevant construction and equipment are maintained in good order;
2. any cargo should be loaded and distributed in pursuant to information provided in the **approved*** loading manual and the stability information booklet provided onboard the ship;
3. the nominal specific gravity of any cargo should not exceed the allowable value indicated in the loading manual;
4. the remaining operational requirements stipulated in the Code, including those stated in General Note on Attachment 2, should be ensured.

This certificate is valid until (*date of five years after the date of issue*).
Completion date of the survey on which this certificate is based : (*survey date*)
Issued at (*place*) on (*date*)
on behalf of *(the name of the flag government)**.

NIPPON KAIJI KYOKAI

(*name*)
Surveyor

* *Delete if not appropriate.*

Attachment to the certificate No. (*certificate number*)

List of cargoes permitted to be carried.

[illegible]

* *Delete if not appropriate.*

Attachment to the certificate No. (*certificate number*)

General Note

- When it has been required by the Code, persons, who may be exposed to the dust of the cargo, shall wear protective clothing, goggles or other equivalent dust eye-protection and dust filter masks, as necessary.
- When carrying a solid bulk cargo which is liable to emit a toxic or flammable gas, and/or cause oxygen depletion in the cargo space, the appropriate instrument(s) for measuring the concentration of gas and oxygen in the cargo space shall be provided. The instrument(s) shall be of certified safe type for use in explosive atmosphere if required.

Note

1.	Except AMMONIUM NITRATE BASED FERTILIZER (non-hazardous), COAL SLURRY* , SCRAP METAL* and SULPHUR (formed, solid)* .
2.	CHOPPED RUBBER AND PLASTIC INSULATION, COARSE CHOPPED TYRES and GRANULATE TYPE RUBBER are not permitted to be loaded when the planned interval between the commencement of loading and the completion of discharge of the cargoes exceeds 5 days.
3.	AMMONIUM NITRATE BASED FERTILIZER (non-hazardous) is to be stowed out of direct contact with a metal engine room boundary.
4.	PEANUTS (in shell) and Industrial sand coated with resin are to be stowed at least 3m horizontally away from engine room boundaries.
5.	To be stowed at least 3m horizontally away from engine room boundaries.
6.	CASTER MEAL, CASTER POMACE and CASTER FLAKE shall not be carried in bulk.
7.	Consideration shall be given to providing the vessel with the means to top up the cargo spaces with additional supplies of inert gas taking into account the duration of the voyage. The ship's fixed CO2 fire extinguishing system shall not be used for this purpose.
8.	Except Seedcake containing solvent extractions.
9.	Fine grained sulphur (flowers of sulphur) shall not be transported in bulk.
10.	With moisture content of 15% or more.

* *Delete if not appropriate.*

ANNEX

TABLE 1

**LIST OF SOLID BULK CARGOES FOR WHICH A FIXED GAS FIRE-EXTINGUISHING
SYSTEM MAY BE EXEMPTED**

- 1 Cargoes including, but not limited to, those listed in regulation II-2/10:

Ore
Coal (COAL and BROWN COAL BRIQUETTES)
Grain
Unseasoned timber
- 2 Cargoes listed in the International Maritime Solid Bulk Cargoes (IMSBC) Code, which are not combustible or constitute a low fire risk, as follows:
 - .1 all cargoes not categorized into Group B in the IMSBC Code; and
 - .2 the following cargoes categorized into Group B in the IMSBC Code:

ALUMINIUM SMELTING BY-PRODUCTS, UN 3170
(Both the names ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM REMELTING BY-PRODUCTS are in use as proper shipping name)
ALUMINIUM FERROSILICON POWDER, UN 1395
ALUMINIUM SILICON POWDER, UNCOATED, UN 1398
CALCINED PYRITES (Pyritic ash)
DIRECT REDUCED IRON (A) Briquettes, hot moulded
FERROPHOSPHORUS (including briquettes)
FERROSILICON, with more than 30% but less than 90% silicon, UN 1408
FERROSILICON, with 25% to 30% silicon, or 90% or more silicon
FLUORSPAR (calcium fluoride)
LIME (UNSLAKED)
LOGS
MAGNESIA (UNSLAKED)
PEAT MOSS
PETROLEUM COKE*
PITCH PRILL
PULP WOOD
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY MATERIAL (LSA-1), UN 2912 (non fissile or fissile – excepted)
RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECT(S) (SCO-I or SCO-II), UN 2913 (non fissile or fissile – excepted)
ROUNDWOOD
SAW LOGS
SILICOMANGANESE
SULPHUR, UN 1350
TIMBER
VANADIUM ORE
WOODCHIPS, with moisture content of 15% or more
ZINC ASHES, UN 1435

* When loaded and transported under the provisions of the IMSBC Code.

- 3 Solid bulk cargoes which are not listed in the IMSBC Code, provided that:
- .1 they are assessed in accordance with section 1.3 of the Code;
 - .2 they do not present hazards of Group B as defined in the Code; and
 - .3 a certificate has been provided by the competent authority of the port of loading to the master in accordance with 1.3.2 of the Code.

