

## CCS Rule Change Notice For: GUIDELINES FOR DEVELOPMENT AND SURVEY OF THE INVENTORY OF HAZARDOUS MATERIALS OF SHIPS

Effective from: 1 Jan. 2020

**Beijing** 

### **CONTENTS**

Chapter 1	GENERAL3
1.1 (	Objective and application3
1.3 (	Controls of ships' Hazardous Materials3
Chapter 2	GENERAL INTRODUCTION OF SURVEY AND CERTIFICATION3
2.1 (	General requirements3
2.4 A	Assignment of class notation "GPR" or "GPR (EU)" and surveys4
2.5 A	Assignment of class notation "GPR+" or "GPR (EU)+" and surveys4
2.6	Disclaimer4
Chapter 3	B DEVELOPMENT OF THE INVENTORY OF HAZARDOUS MATERIALS FOR NEW SHIPS
AND SUR	VEYS5
3.1 (	General requirements5
3.6 I	nitial survey for new ships5
Chapter 4	DEVELOPMENT OF THE INVENTORY OF HAZARDOUS MATERIALS FOR EXISTING SHIPS
AND SUR	VEYS6
4.4	nitial survey for existing ships6
Annex 1	Items to be Listed in the Inventory of Hazardous Materials7
Annex 2	Standard Format of the Inventory of Hazardous Materials and Format of Document of
Complian	ce of the Inventory of Hazardous Materials9
Annex 3	Form of Material Declaration12

### Chapter 1 GENERAL

### 1.1 Objective and application

1.1.3 Ships to which Regulation (EU) No 1257/2013 applies or ships applying for CCS class notation "Green passport" GPR (EU) or GPR (EU)+ are to comply with relevant requirements of Regulation (EU) No 1257/2013 (see Appendix 1 to references of the Guidelines for details) in addition to the requirements of the Guidelines.

### 1.3 Controls of ships' Hazardous Materials

- 1.3.1 The new installation of materials listed in Table A of Annex 1 on ships is to be prohibited. However, the use of such hazardous materials may be permitted provided they are present in concentrations not above the threshold levels specified for each "homogeneous material" and such hazardous materials are to be listed in the Inventory of Hazardous Materials (IHM). The use of new installations containing hydrochlorofluorocarbons (HCFCs) may be permitted before 1 January 2020, except ships flying the flag of EU members, ships applying for CCS class notation "GPR (EU) / GPR (EU)+" or ships applying for the issuance of Document of Compliance of the Inventory of Hazardous Materials in compliance with Regulation (EU) No 1257/2013.
- 1.3.2 The use of materials listed in Table B of Annex 1 may be permitted, however, such materials are to be identified and listed in IHM if they are present in concentration above the threshold levels specified for each "homogeneous material".

### Chapter 2 GENERAL INTRODUCTION OF SURVEY AND CERTIFICATION

### 2.1 General requirements

- 2.1.1 Surveys specified in the Guidelines include initial survey, renewal survey, additional survey and final survey.
- (1) Initial survey: An initial survey is to be conducted before the ship is put in service or when applying for the first time the issuance of the International Certificate on Inventory of Hazardous Materials/Document of Compliance of the Inventory of Hazardous Materials or when applying the assignment of CCS class notation "Green Passport" GPR, GPR+, or GPR (EU) or GPR (EU)+.
- (2) Renewal survey: In order to remain the validity of International Certificate on Inventory of Hazardous Materials/IHM Document of Compliance or CCS class notation "GPR", "GPR+", and

"GPR (EU)" or GPR (EU)+, a renewal survey is to be conducted before the date of expiry.

### 2.4 Assignment of class notation "GPR" or "GPR (EU)" and surveys

- 2.4.1 CCS is to conduct the surveys taking into account the requirements for initial survey for new ships or existing ships as specified in the Guidelines at the request of shipowner and to assign class notation "Green Passport" (GPR or GPR (EU)) to ships satisfactorily surveyed and complying with the relevant requirements of Chapter 8, PART EIGHT of CCS Rules for Classification of Sea-going Steel Ships.
- 2.4.2 Ships with class notation "GPR" or "GPR (EU)" are to be surveyed according to the relevant requirements of Chapter 6, PART ONE of CCS Rules for Classification of Sea-going Steel Ships so as to remain the validity of the class notation.

### 2.5 Assignment of class notation "GPR+" or "GPR (EU)+" and surveys

- 2.5.1 Paragraph 2.4 also applies to the assignment of class notation "GPR+" or "GPR (EU)±" and surveys.
- 2.5.2 While verifying the Inventory of Hazardous Materials of Ships, it is to be confirmed that the use of perfluorooctane sulfonic acid and brominated flame retardant has been identified by the ship, complying with relevant requirements of Regulation (EU) No 1257/2013 (see Appendix 1 of references of the Guidelines for details). In addition, the sampling tests shall be conducted in accordance with the supplementary requirements described in 3.6.8 or 4.4.10 of this guidelines to further verify the Inventory of Hazardous Materials of Ships.

### 2.6 Disclaimer

The assignment of class notation "GPR", "GPR+", "GPR (EU)" or "GPR (EU)±", the issuance and/or endorsement of certificate/document of compliance undertaken by CCS is carried out on the basis that the designer, shipyard, supplier and shipowner fulfill their respective responsibilities. The party who makes any information available to CCS is to be responsible for the truthfulness, timeliness and completeness of such information. The services provided by CCS do not mean to diminish any liability of any party mentioned above or absolve it therefrom.

### Chapter 3 DEVELOPMENT OF THE INVENTORY OF HAZARDOUS

### **MATERIALS FOR NEW SHIPS AND SURVEYS**

### 3.1 General requirements

3.1.2 During the development of the Inventory (Part I), the presence of materials or the presence of materials above the threshold values listed in Table A of Annex 1 is to be checked and confirmed (new installations containing hydrochlorofluorocarbons (HCFCs) may be permitted before 1 January 2020), except ships flying the flag of EU members, ships applying for CCS class notation "GPR (EU) / GPR (EU)+" or ships applying for the issuance of Document of Compliance of the Inventory of Hazardous Materials in compliance with Regulation (EU) No 1257/2013). If such materials are used not above the threshold values, their quantity and location are to be listed in Part I of the Inventory.

### 3.6 Initial survey for new ships

3.6.8 Supplementary requirements for the assignment of CCS class notation "GPR±" or "GPR (EU)±" to new ships

For ships applying for the assignment of class notation "GPR±" or "GPR (EU)±", the surveyor may request the shipyard to carry out random testing and verification on the ship for products with the declaration that no hazardous material is contained or the concentration of hazardous materials is lower than the threshold level, taking into consideration the hazardous materials listed in Table A and Table B in addition to the surveys specified above.

### Chapter 4 DEVELOPMENT OF THE INVENTORY OF HAZARDOUS

### MATERIALS FOR EXISTING SHIPS AND SURVEYS

### 4.4 Initial survey for existing ships

4.4.10 Supplementary requirements for the assignment of CCS class notation "GPR+" or "GPR (EU)+" to existing ships

For ships applying for the assignment of class notation "GPR+" or "GPR (EU)+", the surveyor may request the shipowner to carry out random testing and verification on the ship for products with the declaration that no hazardous material is contained or the concentration of hazardous materials is lower than the threshold level, taking into consideration the hazardous materials listed in Table A and Table B in addition to the surveys specified above.

Sampling check organization/hazardous materials testing organization is to be the organization recognized or accepted by CCS. The sampling check organization is to develop visual and sampling check plan which covers the hazardous materials listed in Table A and Table B of Annex 1. Sampling checkpoints are to cover the whole ship according to Annex 5 "Distribution of Common Hazardous Materials on Ships" and may be adjusted taking into account the complexity of the specific type of ship. In general, the total amount of samples selected for check is not to be less than 100 except that the shipowner or supplier can provide the testing report issued by the testing organization recognized or accepted by CCS for the products (or the same batch of products) to be sampling checked within the scope of visual and sampling check plan.

The surveyor is to review and approve the visual and sampling check plan and confirm the final check report with the reference to Annex 5 "Distribution of Common Hazardous Materials on Ships", taking into account the examination of documents and field survey.

If any non-compliant hazardous materials listed in Table A are found, the inspection organization is to cooperate with the shipowner in the development of the scope and plan for the replacement of products. After the shipowner replace the products thoroughly and the completion of the replacement is confirmed by the inspection organization, the checking declaration clarifying that the replacement is completed in compliance with the requirements. The surveyor is to review and confirm the declaration.

If any non-compliant hazardous materials listed in Table B are found, the inspection organization is to coordinate with the shipowner in the update of the Inventory of Hazardous Materials for the review and confirmation of the surveyor.

### Annex 1 Items to be Listed in the Inventory of Hazardous Materials

Table A Hazardous materials to be prohibited

				Inventor	y	
No.	M	Materials		Part II	Part III	Threshold value
A-1	Asbestos					0.1% <sup>①</sup>
A-2	Polychlorinated biphenyls	s (PCBs)	×			50 mg/kg
		CFC	×			
		Halons	×			
	Other fully halogenated CFCs	×				
		Carbon tetrachloride	×			
A-3	Ozone Depleting Substances	1,1,1-Trichloroethane (Methyl chloroform)	×			no threshold value <sup>©</sup>
		Hydrochlorofluorocarbons	×			
		Hydrobromofluorocarbons	×			
		Methyl bromide	×			
		Bromochloromethane	×			
A-4	Anti-fouling systems containing organotin compounds as a biocide		×			2,500 mg total tin/kg <sup>®</sup>
A-5	Perfluorooctane sulfonic acid (PFOS) <sup>®</sup> and its derivatives (CAS No: 1763-23-1)		×			Concentrations of PFOS above 10 mg/kg (0.001% by weight) when it occurs in substances or in preparations or Concentrations of PFOS in semi-finished products or articles, or parts thereof equal to

-

① In accordance with regulation 4 of the Convention, for all ships, new installation of materials which contain asbestos shall be prohibited. According to the UN recommendation "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" adopted by the United Nations Economic and Social Council's Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (UNSCEGHS), the UN'S Sub-Committee of Experts, in 2002 (published in 2003), carcinogenic mixtures classified as Category 1A (including asbestos mixtures) under the GHS are required to be labelled as carcinogenic if the ratio is more than 0.1%. However, if 1% is applied, this threshold value should be recorded in the Inventory and, if available, the Material Declaration and can be applied not later than five years after the entry into force of the Convention. The threshold value of 0.1% need not be retroactively applied to those Inventories and Material Declarations.

<sup>2 &</sup>quot;No threshold value" is in accordance with the Montreal Protocol for reporting ODS. Unintentional trace contaminants should not be listed in the Material Declarations and in the Inventory.

<sup>(3)</sup> This threshold value is based on the *Guidelines for brief sampling of anti-fouling systems on ships* (resolution MEPC.104(49)).

<sup>(4)</sup> For ships flying the flag of EU members, ships applying for CCS class notation "GPR (EU) / GPR (EU)+" or ships applying for the issuance of Document of Compliance of the Inventory of Hazardous Materials in compliance with Regulation (EU) No 1257/2013 only.

		or above than
		0.1% by weight
		calculated with
		reference to the
		mass of
		structurally or
		micro-structurally
		distinct parts that
		contain PFOS
		or
		For textiles or
		other coated
		materials, if the
		amount of PFOS
		is equal to or
		<i>above</i> than 1
		$\mu g/m^2$ of the
		coated material.

Table B Hazardous materials to be controlled

No.	Materials		Inventory	Threshold	
NO.	Waterials	Part I	Part II	Part III	level
B-1	Cadmium and cadmium compounds	×			100 mg/kg <sup>①</sup>
B-2	Hexavalent chromium and hexavalent chromium compounds	×			1,000 mg/kg
B-3	Lead and lead compounds	×			1,000 mg/kg
B-4	Mercury and mercury compounds	×			1,000 mg/kg
B-5	Polybrominated biphenyl (PBBs)	×			50 mg/kg <sup>©</sup>
B-6	Polybrominated diphenyl ethers (PBDEs)	×			1,000 mg/kg
B-7	Polychlorinated naphthalenes (more than 3 chlorine atoms)	×			50 mg/kg <sup>®</sup>
B-8	Radioactive substances	×			no threshold value <sup>4</sup>
B-9	Certain shortchain chlorinated paraffins (Alkanes, C10-C13, chloro)	×			1% <sup>®</sup>
B-10	Brominated flame retardant (HBCDD)®	×			

① The Organization set this as the threshold value referring to the Restriction of Hazardous Substances (RoHS Directive 2011/65/EU, Annex II).

② The Organization set 50 mg/kg as the threshold value referring to the concentration level at which wastes, substances and articles containing, consisting of or contaminated with PBB are characterized as hazardous under the Basel Convention.

③ The Organization set 50 mg/kg as the threshold value referring to the concentration level at which wastes, substances and articles containing, consisting of or contaminated with PCN are characterized as hazardous under the Basel Convention.

<sup>4</sup> All radioactive sources should be included in the Material Declaration and in the Inventory. Radioactive source means radioactive material permanently sealed in a capsule or closely bonded and in a solid form that is used as a source of radiation. This includes consumer products and industrial gauges with radioactive materials. Examples are listed in appendix 10.

⑤ The Organization set 1% as the threshold value referring to the EU legislation that restricts Chlorinated Paraffins from being placed on the market for use as substances or as constituents of other substances or preparations in concentrations higher than 1% (EU Regulation 1907/2006, Annex XVII Entry 42 and Regulation 519/2012).

⑤ For ships flying the flag of EU members, ships applying for CCS class notation "GPR (EU) / GPR (EU)+" or ships applying for the issuance of Document of Compliance of the Inventory of Hazardous Materials in compliance with Regulation (EU) No 1257/2013 only.

# Annex 2 Standard Format of the Inventory of Hazardous Materials and Format of Document of Compliance of the Inventory of Hazardous Materials

Appendix 3 Format of Document of Compliance of the Inventory of Hazardous Materials (Form: SHK(EU)) is replaced as follows:

Form	SIHM(EU)
No.	

## STATEMENT OF COMPLIANCE ON INVENTORY OF HAZARDOUS MATERIALS(EUROPEAN UNION)

(Note: This Statement of Compliance shall be supplemented by Part I of the Inventory of Hazardous Materials) Issued under the provisions of Regulation(EU) No.1257/2013 (hereinafter referred to as "the Regulation")

Name of Ship	
Distinctive number or letters	
Port of Registry	
Gross tonnage	
IMO number	
Name and address of shipowner	
IMO registered owner identification number	
IMO company identification number	
Date of Construction	
Particulars of Part I of the Inventory of Haz Part I of the Inventory of Hazardous Materials in Note: Part I of the Inventory of Hazardous	identification/verification number:s Materials, as required by Article 12 paragraph 1 of the Regulation is an
essential part of the Statement of Complia the Inventory of Hazardous Materials sho developed by the International Maritime (	ance and must always accompany the Statement of Compliance. Part I of uld be compiled on the basis of the standard format shown in the guidely Drganization, supplemented, where applicable, by guidelines on aspects ISA's Best Practice Guidance on the Inventory of Hazardous Materials.
essential part of the Statement of Complia the Inventory of Hazardous Materials sho developed by the International Maritime (	uld be compiled on the basis of the standard format shown in the guidel Organization, supplemented, where applicable, by guidelines on aspects

CHINA CLASSIFICATION SOCIETY

Form	SIHM(EU)
No.	

### ENDORSEMENT TO EXTEND THE STATEMENT OF COMPLIANCE

	The ship complies with the relevant provisions of the Regulation, and this statement of compliance shall, in accordance with article 12 of the Regulation, be accepted as valid until	
	(dd/mm/yyyy):	
	Place:	
	Date: Surveyor to CHINA CLASSIFICATION SOCIETY	
	ENDORSEMENT FOR ADDITIONAL SURVEY*	
	At an additional survey by analogy of Article 8 paragraph 6 of the Regulation, the ship was found to comply with the relevant provisions of the Regulation.	e
	Place:	
Ш	Date: Surveyor to CHINA CLASSIFICATION SOCIETY	

<sup>\*</sup> This page of the endorsement at survey shall be reproduced and added to the statement of compliance as considered necessary by the Administration.

### **Annex 3** Form of Material Declaration

<Supplier (respondent) information>

Company name Division name

Address

Contact person

Telephone number

<Date of declaration>

<MD ID number>

<Other information>

Remark 1

Remark 2

MD- ID- No.

Date

Rema	Remark 3 Fax number								
						addres			
					SDoC	ID no.:			
<product in<="" td=""><td>nformation&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></product>	nformation>								
D 1	.,		Delive	red unit				D	. 1 . 4 : C 4:
Produ	ct name I	roduct number	Amount	Unit				PIC	oduct information
<materials< td=""><td>information&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td></materials<>	information>								1
								Unit	
	ials information s		t of hazardo	ous mater	ials co	ntained	ın 1		(unit: piece, kg,
$m, m^2, m^3,$	etc.) of the produ	ct.							
					Pre	esent	Te -	.00	TC
			Three	Threshold value		above threshold		es, erial	If yes, information
Table	Material name		ISS					on where it is	
						lue	M	TT	used
	Asbestos	Asbestos	0.19	0/1	Yes	/ No	Mass	Unit	
	Aspestos	Asbestos Polychlorina		70				1	
	Polychlorinate	ted							
	biphenyls	biphenyls	50 m	g/kg					
	(PCBs)	(PCBs)							
		Chlorofluor							
		ocaobons							
		(CFCs)							
Table A		Halons							
		Other fully							
	Ozone depletin	halogenated	no thre	eshold					
	substance	CFCs Carbon	val	ue				-	
		tetrachloride							
		1,1,1-Trichl	1					1	
		oroethane							
		Hydrochloro	7						
		fluorocaobo							

12/14

Inventories and Material Declarations.

① In accordance with regulation 4 of the Convention, for all ships, new installation of materials which contain asbestos shall be prohibited. According to the UN recommendation "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" adopted by the United Nations Economic and Social Council's Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals (UNSCEGHS), the UN'S Sub-Committee of Experts, in 2002 (published in 2003), carcinogenic mixtures classified as Category 1A (including asbestos mixtures) under the GHS are required to be labelled as carcinogenic if the ratio is more than 0.1%. However, if 1% is applied, this threshold value should be recorded in the Inventory and, if available, the Material Declaration and can be applied not later than five years after the entry into force of the Convention. The threshold value of 0.1% need not be retroactively applied to those

		1		1	
	-	ns			
		Hydrobrom			
		ofluorocaob			
		ons			
		Methyl			
		bromide			
	-	Bromochlor			
		omethane			
	Anti-fouling	011101110110			
	systems				
	containing		2,500 mg total		
	organotin		tin/kg		
l cc	ompounds as a				
-	biocide				
	erfluorooctane		Concentrations		
	sulfonic acid		of PFOS above		
(P	PFOS)* and its		10 mg/kg		
	derivatives		(0.001% by		
			weight) when it		
			occurs in		
			substances or in		
			preparations or		
			Concentrations		
			of PFOS in		
			semi-finished		
			products or		
			articles, or parts		
			thereof equal		
			to or above than		
			0.1% by weight		
			calculated with		
			reference to the		
			mass of		
			structurally or		
			micro-structural		
			ly distinct parts		
			that contain		
			PFOS		
			or		
			For textiles or		
			materials, if the		
			amount of		
			PFOS is equal		
			to or above than		
			1 $\mu g/m^2$ of the		
			coated material.		

Table	Material name	Threshold value	Present above threshold value Yes / No	If y mate ma	erial	If yes, information on where it is used
	Cadmium and cadmium compounds	100 mg/kg				
T.11. D	Hexavalent chromium and hexavalent chromium compounds	1,000 mg/kg				
Table B	Lead and lead compounds	1,000 mg/kg				
	Mercury and mercury compounds Polybrominated biphenyl (PBBs)	1,000 mg/kg				
		50 mg/kg				
	Polybrominated dephenyl	1,000 mg/kg				

ethers (PBDEs)			
Polychloronaphthalenes (Cl >= 3)	50 mg/kg		
Radioactive substances	no threshold value		
Certain shortchain chlorinated paraffins	1%		
Brominated flame retardant (HBCDD)*			

<sup>\*</sup>Note: For ships flying the flag of EU members, ships applying for class notation "GPR (EU) / GPR (EU)+" or ships applying for the issuance of Document of Compliance of the Inventory of Hazardous Materials in compliance with Regulation (EU) No 1257/2013.