Subject

Survey and Certification of Polar Code

ClassNK Technical Information

No. TEC-1166

Date 9 November 2018

To whom it may concern

As noticed in ClassNK Technical Information TEC-1096, Polar Code entered into force on 1 January 2017 and the certification procedures were introduced.

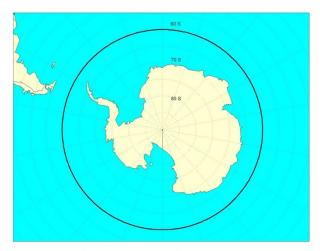
Recently, further clarification of the certification procedures of Polar Ship Certificate for existing ships (specifically, category C cargo ships) has been developed for supplementary information.

1. Application

Polar Code is applied to the ships operating in the areas shown in the figure 1-1 and 1-2 in accordance with the table 1.



Figre 1-1: Arctic Sea



Figre 1-2: Antarctic Sea

(To be continued)

NOTES:

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Table 1: Application of each requirement

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	Part I	Part II	
	Safety measures	Pollution prevention measures	
New ships	Ships keel-laid on or after 1 January 2017	Entry into force on 1 January 2017	
Existing ships	Not later than the first intermediate survey of Safety Construction Certificate (hereafter "SC Certificate")(*1) or renewal survey, whichever occurs earlier, on or after 1 January 2018	Entry in force on 1 January 2017 (*2)	

^{(*1):} In accordance with MSC.1/Circ.1562

Part I of the Code stipulates safety measures including stability, seaworthiness, fire safety and life-saving appliances and radio communications, while Part II sets out pollution prevention measures. For the composition and overview of the Polar Code, please refer to Table 2-1 and Table 2-2.

Table 2-1: Composition and overview of Polar Code (Part I Safety Measures)

Cla a materii	Table 2-1. Composition and overview of Polar Code (Part 1 Safety Measures)				
Chapter	Items	Summary			
Part I-A M	Part I-A Mandatory requirements				
1	General	Definitions, certificate and survey, etc.			
2	Polar Water Operational Manual (*3)	Conditions and procedures for the operation in polar waters, etc.			
3	Ship Structure	Strengthening of hull structures in accordance with the areas of operation, etc.			
4	Subdivision and Stability	Stability taking into account of the ice accretion etc. (damage and intact stability)			
5	Watertight and Weathertight Integrity	Prevention of freezing of closing appliances and operability at the minimum anticipated temperature etc.			
6	Machinery Installations	Prevention of freezing of machinery and emergency source power units, etc.			
7	Fire Safety/Protection	Protection of fire extinguishing systems against clogging by ice, etc.			
8	Life-Saving Appliances and Arrangements	Prevention of life-saving appliances from the ice accretion, etc.			
9	Safety of Navigation	Installation of equipment to receive information for ice and weather information, addition of search lights, etc.			
10	Communication	Addition of communication equipment taking into account the remoteness of polar waters, communication with escort ships, etc.			
11	Voyage Planning	Factors to be considered in developing the voyage plan, etc.			
12	Manning and Training	Additional requirements for qualification of seafarers, manning and training			
Part I-B Recommendation and guidance for the implementation of Part I-A					

^{(*2):} For more details, please see paragraph 4. described hereinafter.

(*3): Polar Water Operational Manual (hereafter "PWOM") is not required to be approved unless otherwise instructed by flag Administrations, e.g. Japan, to do so. However, PWOM is required to include information on the ship-specific capabilities and limitations in relation to the operational assessment and be carried on board.

Table 2-2: Composition and overview of Polar Code (Part II Pollution Prevention Measures)

Chapter	Items	Summary			
Part II-A	Part II-A Mandatory requirements				
1	Prevention of Pollution by Oil	Prohibition of any discharge of oil from ships, protection of tanks containing oil, etc.			
2	Control of Pollution by Noxious Liquid Substances in Bulk	Prohibition of any discharge of noxious liquid substances from ships etc.			
3	Prevention of Pollution by Harmful Substances Carried by Sea in Packaged Form	No additional provisions			
4	Prevention of Pollution by Sewage from Ships	Requirements of distance from the nearest ice-shelf or fast ice when discharging sewage, etc.			
5	Prevention of Pollution by Garbage from ships (*4)	Requirements of distance from the nearest land when discharging garbage, etc.			
Part II-B 1	Part II-B Recommendation and guidance for the implementation of Part II-A				

^{(*4):} For more details, please see ClassNK Technical Information No.TEC-1076.

2. Polar ship category

Every ship to which Polar Code applies is categorized as any one of the following 3 categories corresponding to the ice condition. The applicable category shall be affixed to the ship's class notation and Polar Ship Certificate.

Category A ship: a ship designed for operation in polar waters in at least medium first-year ice,

which may include old ice inclusions. Class notation "Polar Code Category A"

(abbreviation: PC A)

Category B ship: a ship designed for operation in polar waters in at least thin first-year ice,

which may include old ice inclusions. Class notation "Polar Code Category B"

(abbreviated: PC B)

Category C ship: a ship designed to operate in open water or in ice conditions less severe than

those included in categories A and B. Class notation "Polar Code Category C"

(abbreviated: PC C)

Table 3 shows the quick reference matrix for ice category in IACS UR I, ClassNK Rule Part I and Polar Code with respect to the hull structures.

IACS UR I NK Rule Part I Polar Code PC1 PC1 PC2 PC2 Category A PC3 PC3 (class notation: PC-A) PC4 PC4 PC5 PC5 PC6 IA Super PC6 Category B PC7 (class notation: PC-B) PC7 IA IΒ IC Category C ID (class notation: PC-C)

Table 3: Matrix for ice category in IACS UR, ClassNK Rule Part I and Polar Code

3. Confirmation of the compliance of Polar Code

As per the application of requirements which is specified in Table 1, initial survey including plan approval and on-board survey is to be carried out for confirmation of the safety measures and the pollution prevention measures, as required by Part I and Part II of the Code. Drawings/documents are to be examined by ClassNK Head Office prior to the initial survey. Therefore, please submit the operational assessment report and the necessary drawings/documents related to the requirements specified in Table 2-1 and 2-2 to the ClassNK Plan Approval Division in accordance with the operational assessment. Polar Ship Certificate (hereafter "PS Certificate") which states the ship complies with the requirements in Part I of the Code will be issued once the survey is completed. In addition, Certificate of Classification will be re-written with affixing the class notation corresponding to the applicable category.

On the other hand, the initial survey for confirmation of the safety measures (including the issuance of PS Certificate) is to be carried out no later than SC Certificate intermediate survey or renewal survey due date, whichever occurs first, on or after 1 January 2018 in accordance with MSC.1/Circ.1562.

For existing ships which fall under category C, if the result of the assessment shows that no additional equipment or structural modification is required to comply with the Polar Code, ClassNK Head Office may issue PS Certificate without physical survey. For details, please refer to paragraph 5. in this Technical Information.

4. Procedures to comply with Part II for existing ships entering polar waters on or after 1 January 2017

For existing ships entering polar waters on or after 1 January 2017, in order to comply with Part II of the Code, relevant documents such as Oil Record Book, SOPEP and others (*5) are to be revised taking into account of operation in polar waters. Please contact ClassNK Machinery Department about the revision and approval of the documents before entering polar waters.

- (*5): The documents in the following are to be revised taking into account operation in polar waters, as appropriate,
 - -1. Documents related to MARPOL Annex I
 - (1) Oil Record Books
 - (2) The Procedures and Arrangements Manual for the approved crude oil washing system (*)
 - (3) The operation manual for the oil discharge monitoring and control system (*)
 - (4) The clean ballast tank operations manual (*)
 - (5) The shipboard oil pollution emergency plan (*) or the shipboard marine pollution emergency plan (*)
 - -2. Documents related to MARPOL Annex II
 - (1) The Cargo Record Book
 - (2) The Manual for Procedures and Arrangements for discharge of noxious liquid substance (*)
 - (3) The shipboard marine pollution emergency plan for noxious liquid substances (*) or the shipboard marine pollution emergency plan (*)
 - -3. Documents related to MARPOL Annex V
 - (1) Placard
 - (2) Garbage Management Plan (**)
 - (3) Garbage Record Book
 - (*): It is to be approved in accordance with MARPOL / Rule.
 - (**): It is approved at the request of Owners, although approval is not requested in accordance with MARPOL / Rule. (Refer to ClassNK Technical Information No.TEC-1076)
- 5. Certification procedures for existing ships which fall under category C

For existing ships which fall under category C, if the result of the operational assessment shows that no additional equipment or structural modification is required to comply with the Polar Code, ClassNK Head Office may issue the PS Certificate without physical survey based upon documented verification that the ship meets all relevant requirements of the Polar Code. (Refer to Polar Code Part I-A 1.3.3, except Japanese flag ships)

For documented verification, please submit the operational assessment report including the necessary information (such as sailing route, temperature, duration) and PWOM to ClassNK Plan Approval Division.

In this case, the PS Certificate is valid until the expiry date of the SC Certificate, and onboard verification of the relevant documents may be carried out by next scheduled survey.

The due date for compliance with Part I of the Code is brought in line with that of SC Certificate intermediate survey or renewal survey, whichever occurs first, on or after 1 January 2018.

For ships which is intended for polar water navigation before the above due date for Part I of the Code, it is not necessary to issue PS Certificate or conduct the operational assessment, but required to comply with Part II of the Code.

Therefore, please prepare relevant documents related to Part II of the Code in accordance with paragraph 4 in this Technical Information.

6. Rewrite of IOPP Certificate

Although the relevant columns relating to Polar Code are added to IOPP Supplement (Form A, Form B) effective from 1 January 2017 in accordance with the Resolution MEPC.265(68) (only for category A or B vessels the columns to be ticked), IOPP Certificate of existing vessels is not necessary to be rewritten at Occasional Survey for Polar Code (in other words, the current IOPP Certificate is still remains valid) based on MEPC.1 / Circ.856.

Regardless whether the vessel enters polar waters or not, the IOPP Supplement amended by the Resolution MEPC.265(68) will be issued at the next IOPP renewal survey.

For any questions about the above, please contact:

[For questions on general requirements]

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[For questions on approval of SOPEP]

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[For questions on survey]

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[For questions on operational management]

Ship Management Systems Department, Survey Operations Division, Administration Center, Head Office

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Attachment:

- 1. MSC.1/Circ.1562
- 2. Extracts from Resolution MEPC.265(68)
- 3. MEPC.1/Circ.856



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MSC.1/Circ.1562 12 December 2016

UNIFIED INTERPRETATIONS OF SOLAS REGULATION XIV/2.2 AND PARAGRAPHS 1.3.2 AND 1.3.6, PART I-A OF THE POLAR CODE

- The Maritime Safety Committee, at its ninety-seventh session (21 to 25 November 2016), with a view to providing more specific guidance on the initial and maintenance surveys as required in the provisions of SOLAS chapter XIV and the Polar Code, approved the Unified interpretations of SOLAS regulation XIV/2.2 and paragraphs 1.3.2 and 1.3.6, part I-A of the Polar Code, as set out in the annex.
- 2 Member States are invited to use the annexed unified interpretations as guidance when applying SOLAS regulation XIV/2.2 and paragraphs 1.3.2 and 1.3.6, part I-A of the Polar Code and to bring them to the attention of all parties concerned.



ANNEX

UNIFIED INTERPRETATIONS OF SOLAS REGULATION XIV/2.2 AND PARAGRAPHS 1.3.2 AND 1.3.6, PART I-A OF THE POLAR CODE

The implementation of initial and maintenance surveys as required in SOLAS regulation XIV/2.2, as adopted by resolution MSC.386(94), and paragraphs 1.3.2 and 1.3.6, part I-A of the Polar Code, as adopted by resolution MSC.385(94), should be interpreted as indicated in the following table:

INITIAL AND MAINTENANCE SURVEYS PERTAINING TO SOLAS CHAPTER XIV AND THE POLAR CODE

Type of ship	Initial Survey for issuance of the Polar Ship Certificate	Surveys for the maintenance of the Polar Ship Certificate	Surveys for renewal of the Polar Ship certificate
Passenger Ship	First passenger ship's safety renewal survey after 1 January 2018.	Not applicable.	Every year.
Cargo ship	First Safety Construction intermediate survey or renewal survey, as required by SOLAS regulation I/10, whichever occurs first after 1 January 2018.	 a) Aligned with maintenance survey (annual or intermediate) related to the Cargo Ship Safety Certificate. The Polar Ship Certificate should be endorsed upon satisfactory results of the maintenance survey related to the Polar Code and Cargo Ship Safety; or b) Aligned with maintenance survey (annual or intermediate) related to the Safety Construction Certificate. The Polar Ship Certificate should be endorsed upon satisfactory results of the maintenance survey (annual or intermediate) related to the Polar Code and Safety Construction, provided that valid Safety Equipment and Safety Radio Certificates are held by a ship. 	 a) Aligned with renewal survey related to the Cargo Ship Safety Certificate. The Polar Ship Certificate should be reissued upon satisfactory results of the renewal survey related to the Polar Code and Cargo Ship Safety; or b) Aligned with renewal Survey of Safety Construction. The Polar Ship Certificate should be reissued upon satisfactory results of the renewal survey related to the Polar Code and Safety Construction, provided that Safety Equipment and Safety Radio Certificates are held by a ship.

Type of ship	Initial Survey for issuance of the Polar Ship Certificate	Surveys for the maintenance of the Polar Ship Certificate	Surveys for renewal of the Polar Ship Certificate
Passenger Ship	First passenger ship's safety renewal survey after 1 January 2018.	Not applicable.	Every year.
Cargo Ship	First Safety Construction renewal survey as required by SOLAS regulation I/10, which occurs after 1 January 2018 but, in any case, not later than 31 March 2021.	(annual or intermediate) related to the Safety Construction Certificate. The	upon satisfactory results of the renewal survey related to Polar Code and Safety Construction, provided that Safety Equipment and Safety Radio Certificates are

Amendments to MARPOL Annex I Appendix II-RESOLUTION MEPC.265(68) Form of IOPP Certificate and Supplements

Appendix

Supplement to the international Oil Pollution Prevention Certificate (IOPP Certificate) – Form A

- A new section 8 is added after existing section 7 as follows:
 - "8 Compliance with part II-A chapter 1 of the Polar Code

Supplement to the international Oil Pollution Prevention Certificate (IOPP Certificate) – Form B

- A new section 11 is added after existing section 10 as follows:
 - "11 Compliance with part II-A chapter 1 of the Polar Code
 - 11.1 The ship is in compliance with additional requirements in the environment-related provisions of the introduction and section 1.2 of chapter I of part II-A of the Polar Code. *1)"

^{*1)} Section 1.2 of chapter I of part II-A of the Polar Code is Structural requirements for category A and B ships constructed on or after 1st January 2017.



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MEPC.1/Circ.856 22 May 2015

GUIDANCE FOR ISSUING REVISED CERTIFICATES, MANUALS AND RECORD BOOKS UNDER ANNEXES I, II AND V OF MARPOL FOR COMPLIANCE WITH ENVIRONMENT-RELATED REQUIREMENTS OF THE POLAR CODE

- 1 The Marine Environment Protection Committee at its sixty-eight session (11 to 15 May 2015) approved the *Guidance for issuing revised certificates, manuals and record books under Annexes I, II and V of MARPOL for compliance with environment-related requirements of the Polar Code*, as set out in the annex.
- 2 Member Governments are invited to bring the attached guidance to the attention of Administrations, recognized organizations, port authorities, shipowners, ship operators and other parties concerned.

ANNEX

GUIDANCE FOR ISSUING REVISED CERTIFICATES, MANUALS AND RECORD BOOKS UNDER ANNEXES I, II AND V OF MARPOL FOR COMPLIANCE WITH ENVIRONMENT-RELATED REQUIREMENTS OF THE POLAR CODE

Introduction

- The Marine Environment Protection Committee (the Committee), at its sixty-eight session (11 to 15 May 2015), adopted, by resolution MEPC....(68), the environment-related provisions of the International Code for Ships Operating in Polar Waters (Polar Code), together with amendments to MARPOL Annexes I, II and V to make the Introduction and corresponding chapters of part II-A of the Polar Code mandatory (resolution MEPC....(68). The Polar Code is expected to take effect on 1 January 2017, upon entry into force of the associated MARPOL amendments.
- In accordance with the Committee's decision that compliance with the environment-related requirements of the Polar Code should be reflected in the existing certificates, manuals and record books under the relevant Annexes to MARPOL, amendments have been introduced to the following certificates, manuals and record books:
 - .1 Supplement to the International Oil Pollution Prevention Certificate (IOPP Certificate) Forms A and B;
 - .2 Standard format for the Procedures and Arrangements Manual; and
 - .3 Form of Garbage Record Book.
- 3 This guidance advises on the revision of certificates, manuals and record books under Annexes I, II and V of MARPOL for compliance with the environment-related requirements of the Polar Code.

International Oil Pollution Prevention Certificate (IOPP Certificate)

- Amendments have been introduced to the Supplement to the IOPP Certificate (Forms A and B) to certify that category A and B ships constructed on or after 1 January 2017 are in compliance with the additional structural requirements on tank protection, as set out in section 1.2 of chapter 1 of part II-A of the Polar Code.
- In this regard, the Guidance on the timing of replacement of existing certificates by the certificates issued after the entry into force of amendments to certificates in IMO instruments (MSC-MEPC.5/Circ.6) provides, inter alia, that in cases where the ship has not to comply with new requirements, the certificate (and its supplement, if any) is not reissued until its expiry.
- 6 In addition, in cases where the ship has to comply with new requirements, the certificate (and its supplement, if any) is reissued at the first opportunity of the survey related to the new requirement, occurring after the date of entry into force of the amendments.
- In view of the guidance quoted in paragraph 5, it is recommended that ships built before 1 January 2017, operating in polar waters, should be allowed to use the existing IOPP certificate until its expiry, as there are no additional structural requirements for existing ships.

- Paragraph 1.1.3 of chapter 1 of part II-A of the Polar Code requires that, subject to the approval of the Administration, a category A ship constructed before 1 January 2017 that cannot comply with paragraph 1.1.1 for oil or oily mixtures from machinery spaces and is operating continuously in Arctic waters for more than 30 days shall comply with paragraph 1.1.1 not later than the first intermediate or renewal survey, whichever comes first, one year after 1 January 2017.
- 9 It is recommended that the approval of existing category A ships could be achieved through a letter of approval issued by the Administration, using the phase-in provision of paragraph 1.1.3 of chapter 1 of part II-A of the Polar Code, instead of reflecting the approval on the IOPP certificate.

International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk or Certificate of Fitness

- Paragraph 2.1.3 of chapter 2 of part II-A of the Polar Code requires that, for category A and B ships constructed on or after 1 January 2017, the carriage of noxious liquid substances (NLS) identified in chapter 17, column e, as ship type 3 or identified as NLS in chapter 18 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) in cargo tanks of type 3 ships, shall be subject to the approval of the Administration. The results shall be reflected on the International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk or Certificate of Fitness identifying the operation in polar waters.
- The Committee agreed that there is no need for amendments to the NLS Certificate or the Certificate of Fitness and further recommended the following with regard to the approval referred to in paragraph 2.1.3 of chapter 2 of part II-A: when considering the approval of the carriage of NLS identified in chapter 17, column e, as ship type 3 or identified as NLS in chapter 18 of the IBC Code, the carriage conditions for voyages in polar waters may be noted in the column "Conditions of carriage" or in the general remarks related to the certificate. This applies to both the NLS Certificate and Certificate of Fitness.

Standard format for the Procedures and Arrangements Manual

- Amendments have been introduced to paragraphs 1.3 and 4.4 of the standard format for the Procedures and Arrangements Manual, to make reference to the requirements of chapter 2 of part II-A of the Polar Code. The amendments to the manual are to be made prior to entering polar waters on or after 1 January 2017.
- It is recommended that prior approval of the Administration, in accordance with paragraph 8 of the introduction part of the Procedures and Arrangements Manual, may be given automatically for ships introducing modifications to paragraphs 1.3 and 4.4 of the manuals, as set out in resolution MEPC....(68). Where such an automatic approval has been given, this approval remains valid until the first scheduled survey related to the NLS Certificate or the Certificate of Fitness.

Form of Garbage Record Book

- Amendments have been introduced to the chapeau of section 4.1.3 of the Form of Garbage Record Book to make reference to the provisions of chapter 5 of part II-A of the Polar Code.
- 15 It is recommended that no approval is needed for ships introducing modifications to section 4.1.3 of the Form of Garbage Record Book, as set out in resolution MEPC.265(68).

https://edocs.imo.org/Final Documents/English/MEPC.1-CIRC.856 (E).docx