Subject

Format Revision of Condition Evaluation Report (CER)



No. TEC-1092

Date 17 November 2016

To whom it may concern

When Special Survey is carried out for ships applying Enhanced Survey Program(ESP), Condition Evaluation Report (hereinafter referred to as "CER") and Executive Hull Summary (hereinafter "EHS") are issued for the owner, separately, and then the owners are requested to keep them in the file, exclusively used for Condition Evaluation Reports (called "Green File") onboard the ship.

Please be informed that the format of CER is completely revised in accordance with 2011 ESP Code as shown in attachment and the outlines of the changes are provided as follows:

### 1. Incorporation of EHS into CER

EHS is incorporated into the revised CER and the name of "Executive Hull Summary" is still available as a sub title of the revised CER, as per "Condition Evaluation Report (Executive Hull Summary)". CER and EHS, which were issued separately, are unified into the revised CER hereafter.

# 2. Time of issuing CER

CER is issued after Special Survey is completed. Therefore, in a case where Special Survey is divided into commencement, incomplete and complete, CER is issued only after Special Survey Complete, basically.

### Endorsement on CER

CER is prepared by Classification Department, NK Head Office, and endorsed by the Administration or the recognized organization on behalf of the Administration. In a case where NK has obtained approval from the Administration, CER is endorsed by NK.

This Technical Information supersedes the previous ClassNK Technical Information No.TEC-0435, and the revised version will apply to CER which is issued on or after 1 December 2016.

(To be continued)

### NOTES:

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## Attachment:

1. Sample of the revised CER (Special Survey No.3 of Oil Tanker)

Form CER-OT-3S (16.09)



# **CONDITION EVALUATION REPORT**

(Executive Hull Summary)

Issued upon completion of Renewal Survey under the provisions of the 2011 ESP Code

Report No.

### Part 1. General Particulars

Ship's Name	:	Administration Identity Number	:
	:	IMO Number	:
Port of Registry	:	National Flag	:
Deadweight (M. tons)	:	Gross Tonnage : National	:
Date of Build (delivery)	:	Gross Tonnage : ITC (1969)	:
Date of Conversion	:	Type of Conversion	:
Shipowner	:		
Recognized Organization	n Identity Number	:	
Classification Notation		:	
Previous Class/Administ	ration Identity Number	:	
Previous Nation Flag		:	
Previous Shipowner		:	

- 1. The survey records and documents listed in the Part 2 have been reviewed by the undersigned and found to be satisfactory.
- 2. A Summary of the survey is attached herewith.
- 3. The renewal survey has been carried out in accordance with the 2011 ESP Code as amended, and completed on .

Condition Evaluation Report completed by	Name : Signature	Title : Technical Staff / Classification Dept.
Office : ClassNK Head Office,	Classification Dept.	Date :
Condition Evaluation Report verified by	Name : W.Yoshimura Signature	Title : Manager / Classification Dept.
Office: ClassNK Head Office,	Classification Dept.	Date :

# **Contents of Condition Evaluation Report:**

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### Attachment (if any):

(1)

### (Note)

Endorsement should be made in accordance with the provisions of the 2011 ESP Code, e.g. paragraph 8.2.3 of Annex A, Part A in the Code.

(Endorsement by the Recognized Organization on behalf of the Flag Administration)

Title: ClassNK Classification Dept. / General Manager



# Part 2. Report Review (List of Hull Survey Records)

Record No.	Date	Survey Office	Renewal Survey (Entire)	Renewal Survey (Commenced)	Renewal Survey (Continued)	Renewal Survey (Completed)	Ship Dry- Docked

# Part 3. Close-up Survey

Tank / Hold / Objects		Area/Objects subject to close-up survey		Result (ii)
We	eb Frames (in Ballast Tanl			
1	All web frames in all ballast tanks, including adjacent structural members		Х	Х
We	eb Frames (in Cargo Tank	s)		
2	One cargo tank	All web frames in the cargo tank	Х	X
-	(Cargo tank ID:	)	Α	^
3	Remaining all cargo tanks	One web frame in each cargo tank (ID: P-side Tank: Fr. ) (ID: S-side Tank: Fr. ) (ID: Center Tank: Fr. )	Х	х
Tra	ansverse Bulkheads (in Ba	allast Tanks)		
4	All ballast tanks	All transverse bulkheads in each ballast tank, including girder system and adjacent structural members	Х	Х
Tra	Transverse Bulkheads (in Cargo Tanks)			
5	5 All cargo tanks  All transverse bulkheads in each cargo tank, including girder system and adjacent structural members		Х	Х

### Remarks:

(i) Result of Thickness Measurement

X : Measured as required N : TM is not applicable

D : Extent and intensity of measurement was reduced in accordance with regulations

(ii) Result of Close-up Survey

X : Found in order

F : Repaired / Renewed with satisfaction

N : N/A for this ship

Additional Close-up Surveys (if any)

Tank / Hold / Objects	Area/Objects subject to close-up survey	TM (i)	Result (ii)
N/A			

# Part 4. Cargo and Ballast Piping system

Items	Tests	Result (iii)
All cargo and ballast piping systems;  (1) Within; all cargo tanks, all ballast tanks and all tanks and spaces bounding cargo tanks such as pump rooms, pipe tunnels, cofferdams, and void spaces, and  (2) on; the weather deck	Performance and operation test	х

### Remarks:

(iii) X : Found in order including those dispensed with in compliance with the regulations

F : Repaired / Renewed with satisfaction



### Part 5. Thickness Measurements

(1) Reference is made to the thickness measurement report,

(2) Summary of Thickness Measurement

		Areas / Structural Members	Result (iv)
1	Suspect areas identified at previous surveys (Location of suspect areas: )		N
	Wit	nin the cargo length area:	
	(1)	Each deck plate	Х
2	(2)	Two transverse sections (When a transverse stiffening system is employed at the selected sections, frames and their end attachments close to the transverse sections are to be included.) (Transverse sections ID: Fr.	X
	(3)	All "wind and water strakes" (i.e. strakes between loaded water line and ballast water line)	Х
3		actural members subject to close-up survey according to Part 3 for general assessment and recording orrosion pattern	х
4	Sel	ected "wind and water strakes" outside the cargo length area	Х
5	Cargo oil pipes, fuel oil pipes, ballast pipes, vent pipes including vent masts and headers, inert gas pipes and all other pipes in pump room and on exposed decks  (if deemed necessary by the surveyor in consequence of general examinations specified in the Rules Part B, 5.2.2)		х
	Add	ditional Measurements for Chemical Tankers:	
6	Sel tanl	ected steel cargo pipes outside the cargo tanks, and selected ballast pipes passing through the cargo	Х

### Remarks:

- (iv) X : Verified that measurement readings remain within permissible range
  - N : N/A for this ship
  - S : Substantial corrosion was newly found; Thereby additional measurements were carried out.
  - E : Measurement reading was in excess of renewal criteria; See Form CLB of Survey Record for succeeding measures taken
  - D : Extent and intensity of measurement was reduced in accordance with regulations.

Additional Thickness Measurements due to Substantial Corrosion (if any)

	Structural members and its location	,	Result (v)	
	Structural members and its location where substantial corrosion was found			
1	Structural members: (	)		
'	Location: (	)		
	Additional measurements as per rule requirement (Part B, 5.2.6-3)			
	Structural members and its location where substantial corrosion was found			
2	Structural members: (	)		
	Location: (	)		
	Additional measurements as per rule requirement (Part B, 5.2.6-3)		N	

### Remarks:

(v) X : Neither substantial corrosion nor wastage in excess of acceptance criteria was found

Y : Another substantial corrosion was found. Refer to Form CLB for details

Z : Wastage in excess of acceptance criteria was found. Refer to Form CLB for details

N : N/A for this ship



### (3) Substantial Corrosion

Position of substantially corroded tanks/areas or areas with deep pitting (vi) (vii)	Thickness diminution (%)	Corrosion pattern (viii)	Remarks: (e.g. reference to attached sketches)
N/A			

#### Remarks:

- (vi) Substantial Corrosion, i.e. 75 100% of acceptable margin for wastage.
- (vii) Any bottom plate with a pitting intensity of 20% or more, with wastage in the substantial corrosion range or having an average depth of pitting 1/3 or more of actual plate thickness should be noted.

(viii) P: Pitting

C: Corrosion in General

### Part 6. Tank Coating Condition

Tank / Hold / Space	Coating Condition (ix) (x)

### Remarks:

(ix) Coating condition according to the following standard:

GOOD : Condition with only minor spot rusting.

FAIR : Condition with local breakdown of coating at edges of stiffeners and weld connections and/or light rusting

over 20% or more of areas under consideration, but less than as defined for POOR condition.

POOR : Condition with general breakdown of coating over 20% or more of areas or hard scale at 10% or more of

areas under consideration.

(x) If coating condition less than GOOD is given, extended annual surveys are to be introduced. This is noted in Part 8.

### Part 7. Repair

Reference is made to the Survey Record, Form CLB for detail of repairs where repairs were carried out.

,		,
Tank / Hold / Space		Result
		(xi)

Remarks:

(xi) F : Repaired / Renewed

# Part 8. Condition of Recognized Organization (Class) / Flag State Requirements

### Part 9. Memoranda

- (1) Any points of attention for future surveys; e.g. suspect areas: Nil
- (2) Extended annual/intermediate survey due to coating breakdown: Nil

## Part 10. Evaluation Result of Ship's Longitudinal Strength

### for Oil Tankers of 130m in length and upwards and over 10 years of age

(of sections 1, 2 and 3 below, only one applicable section should be completed)

1. This section applies to ships regardless of the date of construction: Transverse sectional areas of deck flange (deck plating and deck longitudinals) and bottom flange (bottom shell plating and bottom longitudinals) of the ship's hull girder have been calculated by using the thickness measured, renewed or reinforced, as appropriate, during the renewal survey of the Cargo Ship Safety Construction Certificate or the Cargo Ship Safety Certificate (SC renewal survey) most recently conducted after the ship reached 10 years of age, and found that the diminution of the transverse sectional area does not exceed 10% of the as-built area, as shown in the following



table:

#### Confirmation on Diminution of Transverse Sectional Area

Diminution	of	Transverse	Sectional	Х	does not exceed 10% of the as-built area
Area					exceeds 10% of the as-built area

### Transverse sectional area of hull girder flange

		Measured	As-built	Diminution
Transverse	Deck flange	cm <sup>2</sup>	cm <sup>2</sup>	cm <sup>2</sup> ( %)
Section 1	Bottom flange	cm <sup>2</sup>	cm <sup>2</sup>	cm <sup>2</sup> ( %)
Transverse	Deck flange	cm <sup>2</sup>	cm <sup>2</sup>	cm <sup>2</sup> ( %)
Section 2	Bottom flange	cm <sup>2</sup>	cm <sup>2</sup>	cm <sup>2</sup> ( %)
Transverse	Deck flange	cm <sup>2</sup>	cm <sup>2</sup>	cm <sup>2</sup> ( %)
Section 3	Bottom flange	cm <sup>2</sup>	cm <sup>2</sup>	cm <sup>2</sup> ( %)

2. This section applies to ships constructed on or after 1 July 2002: Section modulus of transverse section of the ship's hull girder have been calculated by using the thickness of structural members measured, renewed or reinforced, as appropriate, during the SC renewal survey most recently conducted after the ship reached 10 years of age, and are found to be within their diminution limits and not less than 90% of the required section modulus of for new buildings, as shown in the following table:

#### Confirmation on Diminution of Actual Section Moduli

Diminution of Actual Section Modulus	is not less than the renewal criteria
Diffill dition of Actual Section Modulus	Is less than the renewal criteria

### Transverse section modulus of hull girder

		Z_act (cm <sup>3</sup> ) *1	Z_ <sub>req</sub> (cm <sup>3</sup> ) * <sup>2</sup>	Remarks
Transverse	Upper deck			
Section 1	Bottom			
Transverse	Upper deck			
Section 2	Bottom			
Transverse	Upper deck			
Section 3	Bottom			

### Notes:

The calculation sheets for Z<sub>act</sub> should be attached to this report.

3. This section applies to ships constructed before 1 July 2002: Section modulus of transverse sections of the ship's hull girder have been calculated by using the thickness of structural members measured, renewed or reinforced, as appropriate, during the SC renewal survey most recently conducted after the ship reached 10 years of age, and are found to meet the criteria required by the Society and that Z<sub>act</sub> is not less than Z<sub>mc</sub> (defined in note \*2 below), as shown in the following table:

### Confirmation on Diminution of Actual Section Moduli

Diminution of Actual Section Modulus	is not less than the renewal criteria
Diffillation of Actual Section Woodulds	Is less than the renewal criteria

5/6

<sup>\*1</sup> Z\_act means the actual section modulus of the transverse section of the ship's hull girder calculated by using the thickness of structural members measured, renewed or reinforced, as appropriate, during the SC renewal survey.

<sup>\*2</sup> Z<sub>req</sub> means diminution limit of the longitudinal bending strength of ships and not less than 90% of the required section modulus for new buildings.



Transverse section modulus of hull girder

		Z_act (cm <sup>3</sup> ) *1	Z_mc (cm <sup>3</sup> ) *2	Remarks
Transverse	Upper deck			
Section 1	Bottom			
Transverse	Upper deck			
Section 2	Bottom			
Transverse	Upper deck			
Section 3	Bottom			

- Notes:

  \*1 As defined in note \*1 of Table 2.

  \*2 Z\_mc means diminution limit of minimum section modulus calculated in accordance with the Table B5.2.6-1 of the GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS.

## Table B5.2.6-1

Hull Section Modulus					
Applied Rule					
1964 to 1972 version	1973 to 1986	1986 to 2002			
(except case where "fdB" formula applied)	version	version			
Rule requirement or 0.9W <sub>min</sub> ×k, whichever is greater.					
Where:	87% of	90% of			
W <sub>min</sub> : Hull section modulus specified in 15.2.1-2, Part C of the Rules k: Material factor specified in 1.1.7-2, Part C of the Rules	rule requirement	rule requirement			

The calculation sheets for  $Z_{act}$  should be attached to this report.

### Part 11. Conclusion

Evaluation of survey results indicates that the ship is fit for its intended service for the next five year period subject to proper maintenance and operation and to periodical surveys being carried out to the surveyors' satisfaction.

---END---