

# Merchant Marine Circular

Panama Maritime Authority  
General Directorate of Merchant Marine  
Control and Compliance Department

## MERCHANT MARINE CIRCULAR MMC-387

- To:** Recognized Organizations (RO's), Ship-owners/Operators, SEGUMAR Regional Offices, ASI Inspectors, Port State Control Inspectors and all other maritime industry stakeholders.
- Subject:** Mandatory Implementation of the Amendments to the 2011 ESP Code.
- Reference:** IMO Resolution MSC.461 (101) dated 13 June 2019, adopted by Resolution No.107-OMI-240-DGMM of 31 July 2020.
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### 1. Purpose

1.1. This Merchant Marine Circular provides a summary of the principal aspects of the guidelines for the implementation of the amendments to the International Code on the Enhanced Programmed of Inspections during surveys of Bulk Carriers and Oil Tankers, 2011 (2011 ESP Code) on vessels flying Panama flag, aiming to serve of a brief orientation for all maritime industry stakeholders.

1.2. The amendments to the 2011 ESP Code shall enter into force on **1 January 2021**.

### 2. Scope

#### 2.1. Application for Bulk Carrier of Annex A of the ESP Code, Part A & Part B: single-side & double- side skin construction

2.1.1. The Code shall apply to all self-propelled bulk carriers of 500 gross tonnage and above, being single-side skin as well as a double-side skin, bulk carriers.

2.1.2. The Code shall apply to surveys of hull structure and piping systems in way of cargo holds, cofferdams, pipe tunnels, void spaces, fuel oil tanks, within the cargo length area and all ballast tanks.

2.1.3. The Code contains the minimum extent of examination, thickness measurements and tank testing. The survey shall be extended when substantial corrosion and/or structural defects are found and include additional close-up survey when necessary.



# Merchant Marine Circular

- 2.1.4. Ships subject to compliance with regulation XII/6.1 of the SOLAS Convention should be subject to the additional thickness measurement guidance contained in Annex 11 of resolution MSC.461 (101).
- 2.1.5. Ships subject to compliance with resolution MSC.168 (79) shall be subject to the additional thickness measurement guidance contained in Annex 15 of resolution MSC.461 (101).
- 2.1.6. For bulk carriers with hybrid cargo hold arrangements, e.g. with some cargo holds of single-side skin and others of double-side skin, the requirements of Part A of Annex A of resolution MSC.461(101) shall apply to cargo holds of single-side skin and associated wing spaces; meanwhile the requirements of Part B of annex A of the present Resolution shall apply to cargo holds of double-side skin.
- 2.1.7. The surveys shall be carried out during the surveys prescribed by regulation I/10 of the SOLAS Convention, unless expressly provided otherwise in this Code.

## 2.2. Application for Oil Tanker of Annex B of the ESP Code, Part A & Part B: double-hull & other than double-hull oil tankers

- 2.2.1. The Code shall apply to all self-propelled oil tankers of 500 gross tonnage and above, being double -hull, or oil tankers other than double-hull oil tankers, as defined in 1.2.1 of Part A of Annex B of resolution MSC.461(101).
- 2.2.2. The Code shall apply to surveys of hull structure and piping systems in way of cargo tanks, pump-rooms, cofferdams, pipe tunnels, void spaces within the cargo area and all ballast tanks.
- 2.2.3. The Code contains the minimum extent of examination, thickness measurements and tank testing. The survey shall be extended when substantial corrosion and/or structural defects are found and include additional close-up survey when necessary.
- 2.2.4. The surveys shall be carried out during the surveys prescribed by regulation I/10 of the SOLAS Convention, unless expressly provided otherwise in the Code.

## 3. Background

- 3.1. The ESP Code has been developed to provide a consistent survey standard for the regular and safe survey of the cargo and ballast areas of oil tankers and bulk carriers.



# Merchant Marine Circular

The intention of the Code is to ensure that an appropriate level of review of plans and documents is conducted and consistency in application is attained. Such review of survey reports, survey programmed and planning documents should be carried out at the managerial level of the recognized organizations authorized by Panama.

- 3.2.** Parts A and B of Annex A of the Code provide the requirements for bulk carriers with single-side skin and double-side skin construction respectively. Parts A and B of Annex B of the Code provide the requirements for oil tankers with double-hull and non-double-hull construction respectively. The requirements of Part A of Annex B are also applicable to existing double hull tankers not complying with MARPOL regulation I/19, but which have a U-shaped midship section. For single-side skin combination carriers (ore and oil carriers) requirements are specified in the Code set out in Part A of Annex A and Part B of Annex B. For double-side skin combination carriers (ore and oil carriers) requirements are specified in the Code set out in Part B of Annex A and part A of Annex B of resolution MSC.461(101).
- 4. Definitions for Annex A & B of the ESP Code: single-side & double-side skin construction Bulk carriers as well as double-hull & Oil tankers other than double-hull oil tankers**
- 4.1. Bulk carrier**, is a ship which is constructed generally with single deck, topside tanks and hopper side tanks in cargo spaces, and is intended primarily to carry dry cargo in bulk and includes combination carriers.
- 4.2. Double-side skin bulk carrier**, is a ship which is constructed generally with single deck, topside tanks and hopper side tanks in cargo spaces, and is intended primarily to carry dry cargo in bulk including ore carriers and combination carriers, in which all cargo holds are bounded by a double-side skin (regardless of the width of the wing space).
- 4.3. Double-hull oil tanker** is a ship which is constructed primarily for the carriage of oil in bulk, which has the cargo tanks protected by a double-hull which extends for the entire length of the cargo area, consisting of double sides and double-bottom spaces for the carriage of water ballast or void spaces.
- 4.4. Oil tanker** is a ship which is constructed primarily to carry oil in bulk and includes ship types such as combination carriers (ore/oil ships, etc.).
- 4.5. Ballast tank in a Bulk Carrier**, is a tank which is used primarily for salt water ballast, or, where applicable, a space which is used for both cargo and salt water ballast will be treated as a ballast tank when substantial corrosion has been found in that space. A double-side tank shall be considered, for survey purposes, as a separate tank even if it is in connection to either the topside tank or the hopper side tank.



# Merchant Marine Circular

- 4.6. Ballast tank in an Oil Tanker**, is a tank which is used primarily for the carriage of salt water ballast.
- 4.7. Spaces** are separate compartments including holds, tanks, cofferdams and void spaces bounding cargo holds, decks and the outer hull.
- 4.8. Combined cargo/ballast tank**, if referred to within the Code, is a tank which is used for the carriage of cargo or ballast water as a routine part of the vessel's operation and will be treated as a Ballast Tank. Cargo tanks in which water ballast might be carried only in exceptional cases per MARPOL regulation I/18.3 are to be treated as cargo tanks.
- 4.9. Overall survey** is a survey intended to report on the overall condition of the hull structure and determine the extent of additional close-up surveys.
- 4.10. Close-up survey** is a survey where the details of structural components are within the close visual inspection range of the surveyor, i.e. normally within reach of hand.
- 4.11. Transverse section** is the cross section of the hull perpendicular to the ship's centreline and includes all longitudinal members such as plating, longitudinal and girders at the deck, sides, bottom, inner bottom and longitudinal bulkheads. In the case of the Bulk carriers, also include the hopper side plating and bottom plating in top wing tanks. For transversely framed bulk carriers and oil tankers, a transverse section includes adjacent frames and their end connections in way of transverse sections.
- 4.12. Representative spaces / tanks on Bulk carrier or Oil tanker** respectively, are those which are expected to reflect the condition of other spaces / tanks of similar type and service and with similar corrosion prevention systems. When selecting representative spaces /tanks account shall be taken of the service and repair history on board and identifiable critical structural areas and/or suspect areas.
- 4.13. Suspect areas** are locations showing substantial corrosion and/or are considered by the surveyor to be prone to rapid wastage.
- 4.14. Substantial corrosion** is an extent of corrosion such that assessment of corrosion pattern indicates wastage in excess of 75% of allowable margins, but within acceptable limits. For ships built under the IACS Common Structural Rules, substantial corrosion is an extent of corrosion such that the assessment of the corrosion pattern indicates a measured thickness between  $t_{ren} + 0.5$  mm and  $t_{ren}$ . Renewal thickness ( $t_{ren}$ ) is the minimum allowable thickness, in mm, below which renewal of structural members shall be carried out.



# Merchant Marine Circular

**4.15. Corrosion prevention system** is normally considered a full hard protective coating. Hard protective coating should usually be epoxy coating or equivalent. Other coating systems, which are neither soft nor semi-hard coatings, may be considered acceptable as alternatives provided that they are applied and maintained in compliance with the manufacturer's specifications.

**Coating condition** is defined as follows:

- **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; and
- **POOR** condition with general breakdown of coating over 20% or more of areas or hard scale at 10% or more of areas under consideration.

**4.16. Critical structural areas**, are locations which have been identified from calculations to require monitoring or from the service history of the subject ship or from similar or sister ships, if applicable, to be sensitive to cracking, buckling or corrosion which would impair the structural integrity of the ship.

**4.17. Cargo length area** is that part of the ship which includes cargo holds and adjacent areas including fuel tanks, cofferdams, ballast tanks and void spaces.

**4.18. Cargo area** is that part of the ship which contains cargo tanks, slop tanks and cargo/ballast pump-rooms, cofferdams, ballast tanks and void spaces adjacent to cargo tanks and also deck areas throughout the entire length and breadth of the part of the ship over the above-mentioned spaces.

**4.19. Intermediate survey** is a survey carried out either at the second or third annual survey or between these surveys.

**4.20. A prompt and thorough repair** is a permanent repair completed at the time of survey to the satisfaction of the surveyor, therein removing the need for the imposition of any associated condition of classification or recommendation.

**4.21. Convention** means the International Convention for the Safety of Life at Sea, 1974, as amended.

**4.22. Special consideration or specially considered**, (in connection with close-up surveys and thickness measurements) means sufficient close-up inspection and thickness measurements are taken to confirm the actual average condition of the structure under the coating.

**4.23. Pitting corrosion** is defined as scattered corrosion spots/areas with local material reductions which are greater than the general corrosion in the surrounding area. Pitting intensity is defined in Figure 1 of resolution MSC.461 (101).



# Merchant Marine Circular

**4.24. Edge corrosion** is defined as local material loss at the free edges of plates, stiffeners, primary support members and around openings. An example of edge corrosion is shown in Figure 2 of resolution MSC.461 (101).

**4.25. Grooving corrosion** is typically local material loss adjacent to weld joints along abutting stiffeners and at stiffener or plate butts or seams. An example of groove corrosion is shown in Figure 3 of resolution MSC.461 (101).

**4.26. Recognized Organization (RO)**, means an organization that has been assessed by the Administration, and found to comply with the RO Code, adopted by resolution MSC.349 (92).

**4.27. Administration** means the Panama Maritime Authority.

**4.28. Surveyors**, to be assigned as per requirement established under section 1.4 on Annex A and B (Bulk carrier and Oil tanker respectively) of the Resolution MSC 461(101). Refer to paragraph 4.2.4 of part 2 of the Code for Recognized Organizations (RO Code), adopted by resolution MSC.349 (92).

## **5. Instruction to Recognized Organizations**

**5.1.** Recognized Organizations (RO's) approved for the issuance of the Cargo Ship Safety Construction Certificate (SC) listed in the Merchant Marine Circular MMC-136 shall verify the compliance with the new amendments to the 2011 ESP Code on or after 1 January 2021, as applicable.

***September, 2020 - Adoption of the Resolution MSC.461 (101) and mandatory implementation of the amendments to the 2011 ESP Code on or after 1 January 2021.***

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Inquiries concerning the subject of this Merchant Marine Circular or any other request should be forward to:

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