# RULES FOR MARINE POLLUTION PREVENTION SYSTEMS

RULES

**2014 AMENDMENT NO.2**

Rule No.56 30th June 2014

Resolved by Technical Committee on 4th February 2014

Approved by Board of Directors on 24th February 2014

Rule No.56 30th June 2014
AMENDMENT TO THE RULES FOR MARINE POLLUTION PREVENTION SYSTEMS

"Rules for marine pollution prevention systems" has been partly amended as follows:

# Part 8 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

## Chapter 2 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

### 2.1 Nitrogen Oxides (NOx) (*Regulation*13 *of Annex* VI)

#### 2.1.2 Requirements for Installation

Sub-paragraph -1 has been amended as follows.

**1** On each diesel engine, the exhaust gas cleaning system to reduce NOx emissions specified in the approved technical file is to be installed, otherwise the equivalent method to reduce NOx emissions deemed appropriate by the Society is to be carried out in order to keep the NOx emission measured and calculated in accordance with the following **-2** within the limits specified in **Table 8-1(a)** through **(c)** at the number of maximum continuous revolutions (referred to in **2.1.24, Part A of the Rules for the Survey and Construction of Steel ships**, hereinafter the same) of the engine.

(1) Marine diesel engines which are installed on ships constructed on or after 1 January 2000

(a) Tier I

For ships constructed on or after 1 January 2000 and prior to 1 January 2011 which are installed with marine diesel engines

Table 8-1(a) Maximum allowable NOx emission limits (Tier I)

| Number of maximum continuous revolutions $N_0$ (*rpm*) | Maximum allowable NOx emission limits (*g/kWh*) |
|---|---|
| $N_0 < 130$ | 17.0 |
| $130 \leqq N_0 < 2000$ | $45.0 \times N_0^{(-0.2)}$ |
| $2000 \leqq N_0$ | 9.8 |

(b) Tier II

For ships constructed on or after 1 January 2011 which are installed with marine diesel engines

Table 8-1(b) Maximum allowable NOx emission limits (Tier II)

| Number of maximum continuous revolutions $N_0$ (*rpm*) | Maximum allowable NOx emission limits (*g/kWh*) |
|---|---|
| $N_0 < 130$ | 14.4 |
| $130 \leqq N_0 < 2000$ | $44.0 \times N_0^{(-0.23)}$ |
| $2000 \leqq N_0$ | 7.7 |

(c) Tier III

For ships constructed on or after 1 January 2016 which are installed with marine diesel engines and are operated in NOx Emission Control Areas. However, the following types of ships are exempted: ships which are installed with marine diesel engines that are less than 24*m* in length and that have been specifically designed for recreational purposes; and ships which are installed with marine diesel engines that have a combined nameplate diesel engine propulsion power of less than 750*kW* which can demonstrate, to the satisfaction of the Administration, the inability, that the ship cannot to comply with the standards specified in **Table 8-1(c)** because of design or construction limitations.

Table 8-1(c) Maximum allowable NOx emission limits (Tier III)

| Number of maximum continuous revolutions $N_0$ (*rpm*) | Maximum allowable NOx emission limits (*g/kWh*) |
|---|---|
| $N_0 < 130$ | 3.4 |
| $130 \leqq N_0 < 2000$ | $9.0 \times N_0^{(-0.2)}$ |
| $2000 \leqq N_0$ | 2.0 |

(2) Major conversions of marine diesel engines performed on or after 1 January 2000

When replacing a marine diesel engine with a non-identical marine diesel engine or when installing an additional marine diesel engine, the standards in force at the time of the replacement or addition of the engine are to be applied. However, for engine replacements which take place on or after 1 January 2016, if it is not possible for the replacement engine to meet the standards set forth in **Table 8-1(c)**, then said replacement engine is to meet the standards set forth in **Table 8-1(b)**. The criteria for determining when it is not possible for a replacement engine to meet the standards in **Table 8-1(c)** are to be accordance with relevant guidelines established by the *IMO*.

## EFFECTIVE DATE AND APPLICATION

**1.** The effective date of the amendments is 30 June 2014.

# GUIDANCE FOR MARINE POLLUTION PREVENTION SYSTEMS

GUIDANCE

**2014 AMENDMENT NO.2**

Notice No.41 30th June 2014

Resolved by Technical Committee on 4th February 2014

Notice No.41 30th June 2014
AMENDMENT TO THE GUIDANCE FOR MARINE POLLUTION PREVENTION SYSTEMS

"Guidance for marine pollution prevention systems" has been partly amended as follows:

Amendment 2-1

# Part 3 CONSTRUCTION AND EQUIPMENT FOR THE PREVENTION OF POLLUTION BY OIL

## Chapter 3 CONSTRUCTION AND EQUIPMENT FOR THE PREVENTION OF POLLUTION BY OIL CARRIED IN BULK

### 3.3 Installations and Piping Arrangements

#### 3.3.1 Installations for the Retention of Oil on Board

Sub-paragraph -2 has been amended as follows.

(-1 is omitted.)
**2** The wording "oil discharge monitoring and control system for ballast water approved by the Society" in **3.3.1-6 in Part 3 of the Rules** means to comply with the following standards and to have a copy of type approval certificate issued by the Society, the Administration or a competent organization.
(1) For ships at beginning stage of construction on or after 1 January 2005: *IMO Res. MEPC.*108(49)
(2) For ships intended to transport Bio-fuel blends containing 75% or more of petroleum oil at beginning stage of construction on or after 1 January 2005: *IMO Res. MEPC.*240(65), unless instructed otherwise by the Administration
(3) For other ships than above **(1)** and **(2)** at beginning stage of construction on or after 2 October 1986: *IMO Res. A.*586(14)
(~~3~~4) For other ships than above **(1)** ~~and~~to **(~~2~~3)**: *IMO Res. A.*496(XII) and *MEPC.*13(19)
(-3 to -7 are omitted.)

# Part 8 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

## Chapter 2 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

### 2.1 Nitrogen Oxides (NOx) (*Regulation*13 *of Annex* VI)

#### 2.1.2 Requirements for Installation

Sub-paragraph -1 has been amended as follows.

**1** Major conversion of a marine diesel engine is to be accordance with following:

(1) ~~For the replacement of a marine diesel engine with a non-identical marine diesel engine or the installation of an additional marine diesel engine, the standards specified in **2.1.2-1, Part 8 of the Rules** in force at the time of the replacement or addition of the engine are to be applied. On or after 1 January 2016, in the case of replacement engines only, if it is not possible for such a replacement engine to meet the standards set forth in **2.1.2-1(c), Part 8 of the Rules**, then that replacement engine is to meet the standards set forth in **2.1.2-1(b), Part 8 of the Rules**. Guidelines are to be developed by the *IMO* to set forth the criteria of when it is not possible for a replacement engine to meet the standards in **2.1.2-1, Part 8 of the Rules**.~~ Where<u>In **2.1.2-1(2), Part 8 of the Rules**</u>, the "time of the replacement or addition of the engine" mentioned above refers to any of the following **(a)** to **(c)**:

   (a) The contractual delivery date of the engine to the ship. However, the engine is to be fitted on board and tested before 1 July 2016.

   (b) In the absence of a contractual delivery date, the actual delivery date of the engine to the ship, provided that the date is confirmed by a delivery receipt. However, the engine is to be fitted on board and tested before 1 July 2016.

   (c) In the event the engine is fitted on board and tested for its intended purpose on or after 1 July 2016, the actual date that the engine is tested on board.

<u>(2) "Guidelines established by the *IMO*" specified in **2.1.2-1(2), Part 8 of the Rules** refers to the *"2013 Guidelines as Required by Regulation 13.2.2 of MARPOL ANNEX VI in Respect of Non-Identical Replacement Engines Not Required to Meet the Tier III Limit (IMO Res.MEPC.230(65)*, as amended)".</u>

(~~2~~3) Any substantial modification or increasing of the maximum continuous rating of the engine by more than 10% compared to the maximum continuous rating of the original certification of the engine is to be made in accordance with following:

   (a) For ships constructed prior to 1 January 2011, the standard in **2.1.2-1<u>(1)</u>(a), Part 8 of the Rules** is to be applied.

   (b) For ships constructed on or after 1 January 2011, the standard in **2.1.2-1<u>(1)</u>(b), Part 8 of the Rules** is to be applied.

   (c) For ships constructed on or after 1 January 2016, the standard in **2.1.2-1<u>(1)</u>(c), Part 8 of the Rules** is to be applied.

# Chapter 3 ENERGY EFFICIENCY FOR SHIPS

## 3.1 General

### 3.1.2 **Terminology** (*Regulation* 2 of *Annex* VI)

Sub-paragraph -2 has been amended as follows.

**2** "Reference lines" specified in **3.1.2(8), Part 8 of the Rules** ~~means~~refers to those calculated in accordance with the *"2013 Guidelines for Calculation of Reference Lines for Use with the Energy Efficiency Design Index (EEDI)(IMO Res.MEPC.215(63), as amended)"* as well as the *"2013 Guidelines for Calculation of Reference Lines for Use with the Energy Efficiency Design Index (EEDI) for Cruise Passenger Ships Having Non-Conventional Propulsion (IMO Res.MEPC.233(65), as amended)"*.

Section 3.2 has been amended as follows.

## 3.2 Attained Energy Efficiency Design Index (Attained EEDI) (*Regulation* 20 of *Annex* VI)

**1** "Guidelines deemed appropriate by the Society" specified in **3.2-1, Part 8 of the Rules** ~~means~~refers to the "*2012 Guidelines on Survey and Certification of the Energy Efficiency Design Index (EEDI) (IMO Res.MEPC.214(63), as amended*)" as well as IACS Procedural Requirement (PR) No.38 *"Procedure for calculation and verification of the Energy Efficiency Design Index (EEDI)"*.

**2** "Guidelines deemed appropriate by the Society" specified in **3.2-3, Part 8 of the Rules** ~~means~~refers to the "*2012 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for New Ships (IMO Res.MEPC.212(63), as amended*)" as well as IACS Procedural Requirement (PR) No.38 *"Procedure for calculation and verification of the Energy Efficiency Design Index (EEDI)"*.

## 3.3 Required Energy Efficiency Design Index (Required EEDI) (*Regulation* 21 of *Annex* VI)

Sub-paragraph -5 has been amended as follows.

**5** "Guidelines deemed appropriate by the Society" specified in **3.3-4, Part 8 of the Rules** ~~means~~refers to the ~~related guidelines to be developed by the *IMO*~~*"2013 Interim Guidelines for Determining Minimum Propulsion Power to Maintain the Manoeuvrability of Ships in Adverse Conditions (IMO Res.MEPC.232(65), as amended)*".

**3.4 Ship Energy Efficiency Management Plan (SEEMP)** (*Regulation* 22 of *Annex* VI)

Sub-paragraph -1 has been amended as follows.

**1** "Guidelines deemed appropriate by the Society" specified in **3.4-2, Part 8 of the Rules** ~~means~~refers to the "*2012 Guidelines for the Development of a Ship Energy Efficiency Management Plan (SEEMP) (IMO Res.MEPC.213(63)*, *as amended)*".

EFFECTIVE DATE AND APPLICATION (Amendment 2-1)

**1.** The effective date of the amendments is 30 June 2014.

Amendment 2-2

Title has been amended as follows.

## Appendix I CONDITION ASSESSMENT SCHEME

**Resolution *MEPC*.94(46) adopted on 27 April 2001**
**and amended by resolutions *MEPC*.99(48) adopted on 11 October 2002,**
***MEPC*.112(50) adopted on 4 December 2003,**
***MEPC*.131(53) adopted on 22 July 2005,**
**~~and~~ *MEPC*.155(55) adopted on 13 October 2006**
**and *MEPC*. 236(65) adopted on 17 May 2013**

### 1 PREAMBLE

1.6 has been added as follows.

1.6 The Assembly, at its twenty-seventh session, adopted the International Code on the enhanced programme of inspections during surveys of bulk carriers and oil tankers, 2011 (2011 *ESP* Code) (resolution *A*.1049(27)) and the Maritime Safety Committee, at its ninetieth session, adopted, by resolution *MSC*.325(90), amendments to *SOLAS* regulation XI-1/2, replacing "resolution *A*.744(18)" with "the 2011 *ESP* Code" and thereby making the Code mandatory. Therefore, the references to "resolution *A*.744(18)" in the CAS are replaced by references to "the 2011 *ESP* Code (resolution *A*.1049(27))".

### 3 DEFINITIONS

3.10 has been amended as follows.

3.10 "Thickness Measurement (TM) Firm" means a qualified company certified by a RO in accordance with the principles stipulated in ~~a~~Annex 7 ~~to~~ of Annex B to ~~resolution A.744(18)~~ the 2011 *ESP* Code, as amended.

### 6 SURVEY PLANNING REQUIREMENTS

6.2 Survey Plan documentation

6.2.1.3 has been amended as follows.

6.2.1 In developing the Survey Plan, the following documentation shall be collected and reviewed with a view to identifying tanks, areas and structural elements to be examined:
(.1 and .2 are omitted.)

.3 Condition Evaluation Report, according to Annex 9 of Annex B of ~~resolution A.744(18)~~ the 2011 *ESP* Code, as amended, and, where relevant, any previous CAS Final Reports;

(.4 to .12 are omitted.)

6.2.2.9 has been amended as follows.

6.2.2 The Survey Plan shall include relevant information so as to enable the successful and efficient execution of the CAS survey and shall set out the requirements with respect to close-up surveys and thickness measurements. The Survey Plan shall include:

(.1 to .8 are omitted.)

.9 identification of tanks for tank testing, as per Annex 3 of Annex B of ~~resolution A.744(18)~~ the 2011 *ESP* Code, as amended;

(.10 to .13 are omitted.)

## 7 CAS SURVEY REQUIREMENTS

7.3 Extent of thickness measurements

7.3.1 has been amended as follows.

7.3.1 The thickness measurements shall be recorded using the tables contained in Appendix 2 of Annex 10 of Annex B of ~~resolution A.744(18)~~ the 2011 *ESP* Code, as amended. It is recommended that these records be kept in an electronic medium.

7.3.4 has been amended as follows.

7.3.4 Where substantial corrosion is found, the extent of the thickness measurements shall be increased in accordance with Annex 4 of Annex B of ~~resolution A.744(18)~~ the 2011 *ESP* Code, as amended.

7.3.7 has been amended as follows.

7.3.7 The thickness measurement to be taken shall be sufficient to enable the reserve strength calculations in accordance with Annex 12 of Annex B of ~~resolution A.744(18)~~ 2011 *ESP* Code, as amended.

8 has been amended as follows.

## 8 ACCEPTANCE CRITERIA

The acceptance criteria for the CAS shall be those set out in ~~resolution A.744(18)~~ the 2011 *ESP* Code, as amended.

## Appendix 2

## SURVEY PLANNING QUESTIONNAIRE

Text has been amended as follows.

**Inspections by the Company**

Using a format similar to that of the table below (which is given as an example), the Company should provide details of the results of their inspections, for the last 3 years - in accordance with the requirements of ~~resolution A.744(18)~~ the 2011 *ESP* Code, as amended, and of the CAS - on all CARGO and BALLAST tanks and VOID spaces within the cargo area.

## Appendix 3

## MODEL SURVEY PLAN FOR CAS

8 has been amended as follows.

**8 Identifications of tanks for tank testing**

*The CAS requirements*
Paragraph 6.2.2.9 of the CAS states that the tank testing shall be as per annex 3 of Annex B of ~~resolution A.744(18)~~ the 2011 *ESP* Code as amended.

*The Plan*
This section of the Plan shall identify and list the tanks that shall undergo tank testing for this ship.

EFFECTIVE DATE AND APPLICATION (Amendment 2-2)

**1.** The effective date of the amendments is 1 October 2014.
**2.** Notwithstanding the amendments to the Guidance, the current requirements may apply to the surveys for which the application is submitted to the Society before the effective date.