## RULES FOR MARINE POLLUTION PREVENTION SYSTEMS

GUIDANCE FOR MARINE POLLUTION PREVENTION SYSTEMS

#### **Rules for Marine Pollution Prevention Systems**

2021 AMENDMENT NO.1

**Guidance for Marine Pollution Prevention Systems** 

2021 AMENDMENT NO.1

Rule No.62 / Notice No.59 27 December 2021 Resolved by Technical Committee on 28 July 2021



An asterisk (\*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

# RULES FOR MARINE POLLUTION PREVENTION SYSTEMS

#### 2021 AMENDMENT NO.1

Rule No.62 27 December 2021

Resolved by Technical Committee on 28 July 2021

An asterisk (\*) after the title of a requirement indicates that there is also relevant information in the corresponding Guidance.

### Rule No.62 27 December 2021 AMENDMENT TO THE RULES FOR MARINE POLLUTION PREVENTION SYSTEMS

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

#### Part 2 SURVEYS

#### **Chapter 2 REGISTRATION SURVEYS**

- 2.1 Registration Surveys during Construction
- 2.1.3 Inspections of Construction and Equipment\*

Sub-paragraph -5 has been amended as follows.

- 5 Inspections are to be carried out on the following items for the equipment for the prevention of air pollution from every ship of 400 *tons* gross tonnage or above, every mobile offshore drilling unit and other platforms. However, the inspections required in (2)(b) and, (3) excluding (a) and (6) are to be carried out irrespective of tonnage of the ship.
- ((1) to (5) are omitted.)
- (6) Representative sample (in-use samples) position of fuel oil to be used

  Confirmation that positions for representative sample (in-use samples) of fuel oil are fitted or designated.

#### **Chapter 3 REGISTRATION MAINTENANCE SURVEYS**

#### 3.1 Annual Surveys

#### 3.1.2 Inspections of Construction and Equipment\*

Sub-paragraph -4 has been amended as follows.

- 4 Inspections are to be carried out on the following items for the equipment for the prevention of air pollution from every ship of 400 *gross tonnage* and above, every mobile offshore drilling unit and other platforms. The surveys referred to in (3)(b) is and (7) are, however, to be carried out on all ships.
- ((1) to (6) are omitted.)
- (7) Representative sample (in-use samples) position of fuel oil to be used
  Confirmation that positions for representative sample (in-use samples) of fuel oil are fitted or designated.

#### 3.2 Intermediate Surveys

#### 3.2.2 Inspections of Construction and Equipment\*

Sub-paragraph -4 has been amended as follows.

4 Inspections specified in **3.1.2-4** are to be carried out on the equipment for the prevention of air pollution from every ship of 400 *gross tonnage* and above, every mobile offshore drilling unit and other platforms except where all ships are to be subjected to the surveys referred to in **3.1.2-4(3)(b)** and (7).

#### 3.3 Special Surveys

#### 3.3.2 Inspections of Construction and Equipment\*

Sub-paragraph -5 has been amended as follows.

5 Inspections specified in **3.2.2-4** are to be carried out on the equipment for the prevention of air pollution from every ship of 400 *gross tonnage* and above, every mobile offshore drilling unit and other platforms except where all ships are to be subjected to the surveys referred to in **3.1.2-4(3)(b)** and (7).

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

#### Chapter 1 GENERAL

#### 1.1 General

**1.1.2 Terminology** (*Regulation* 2, 13, 14 and 16 of *Annex* VI and 1.3, 4.1, 4.3.9 and 4.4.8 of *NOx Technical Code*)\*

For the purpose of the requirements in this Part, the following definitions apply unless specified otherwise in Chapters 2 or 3:

Sub-paragraphs (25) and (26) have been added as follows.

- ((1) to (24) are omitted.)
- (25) "Low-flashpoint fuel" means the gaseous or liquid fuel specified in 2.2.1-28, Part GF.
- (26) "In-use sample" means a sample of fuel oil in use on a ship.

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

Section 2.2 has been amended as follows.

#### 2.2 Sulphur Oxides (SOx) and Particulate Matter (Regulation 14 of Annex VI)

## 2.2.1 Fuel Oil Change-over on Ship Operating in SOx Emission Control Areas (Regulation 14 of Annex VI)

(-1 and -2 are omitted.)

#### 2.2.2 In-use fuel oil sampling points\*

- 1 For ships (including mobile offshore drilling units and other platforms) which are at the beginning stage of their construction on or after 1 April 2022 and which are deemed necessary by the Society, sampling points are to be fitted or designated for the purpose of taking representative samples (in-use samples) of the fuel oil being used on board the ship, taking into account guidelines deemed appropriate by the Society.
- 2 For ships (including mobile offshore drilling unit and other platforms) which are at the beginning stage of their construction before 1 April 2022 and which are deemed necessary by the Society, the sampling points specified in -1 above are to be fitted or designated no later than the first Special Survey carried out on or after 1 April 2023.
- <u>3</u> The requirements specified in -1 and -2 above are not applicable to fuel oil service systems for low-flashpoint fuels for combustion purposes for propulsion or operation on board the ship.

#### **Chapter 3 ENERGY EFFICIENCY FOR SHIPS**

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

Table 8-8 has been amended as follows.

Table 8-8 Reduction Factors (In Percentage) for EEDI Relative to the EEDI Reference Line

		Padvation Factors (9/)					
		Reduction Factors (%)					
		Phase 0	Phase 1	Phase 2		Phase 3	
Ship Type	Size	1 Jan. 2013	1 Jan. 2015 -	1 Jan. 2020 -	1 Jan. 2020 -		
1 71		-	31 Dec.	31 Mar.	31 Dec.	1 Apr. 2022	1 Jan. 2025
		31 Dec.	2019	2022	2024	and onwards	and onwards
		2014					
Bulk Carrier	20,000 DWT -	0	10		20		30
	10,000 - 20,000 DWT	n/a	0-10 <sup>(1)</sup>		0-20(1)		0-30 <sup>(1)</sup>
Gas Carrier	1 <del>0</del> 5,000 DWT -	0	10	<u>20</u>	<del>20</del>	<u>30</u>	<del>30</del>
	10,000 - 15,000 DWT	0	10		20		<u>30</u>
	2,000 - 10,000 DWT	n/a	0-10 <sup>(1)</sup>		0-20(1)		0-30(1)
Tanker	20,000 DWT -	0	10		20		30
	4,000 - 20,000 DWT	n/a	0-10 <sup>(1)</sup>		0-20(1)		0-30(1)
	200,000 DWT -	0	10	20	0.20	50	0 30
	120,000 - 200,000	<u> </u>	10	<u>20</u>		<u>50</u>	
	<u>120,000 - 200,000</u> <u>DWT</u>	<u>0</u>	<u>10</u>	<u>20</u>		<u>45</u>	
Container	80,000 - 120,000						
	DWT	<u>0</u>	<u>10</u>	<u>20</u>		<u>40</u>	
Ship	40,000 - 80,000 DWT	0	10	20		25	
		<u>0</u>	<u>10</u>	<u>20</u>	20	<u>35</u>	20
	15,000 <u>40,000 DWT</u>	0	10	20	20	30 15.20(1)	30 0.20(1)
	10,000 - 15,000 DWT	n/a	0-10 <sup>(1)</sup>	0-20(1)	<del>0-20<sup>(1)</sup></del>	<u>15-30<sup>(1)</sup></u>	<del>0-30<sup>(1)</sup></del>
General Cargo	15,000 DWT -	0	10	<u>15</u>	15	30	<del>30</del>
Ships	3,000 - 15,000 DWT	n/a	0-10 <sup>(1)</sup>	<u>0-15<sup>(1)</sup></u>	<del>0-15</del> <sup>(1)</sup>	0-30(1)	<del>0.30<sup>(1)</sup></del>
Refrigerated	5,000 DWT -	0	10		15		30
Cargo Carrier	3,000 - 5,000 DWT	n/a	0-10 <sup>(1)</sup>		0-15(1)		0-30(1)
Combination	20,000 DWT -	0	10		20		30
Carrier	4,000 - 20,000 DWT	n/a	0-10 <sup>(1)</sup>		0-20(1)		0-30(1)
LNG carrier <sup>(3)</sup>	10,000 DWT -	n/a	10 (2)	<u>20</u>	<del>20</del>	<u>30</u>	<del>30</del>
Ro-ro cargo ship (vehicle carrier) (3)	10,000 DWT -	n/a	5 <sup>(2)</sup>		15		30
Ro-ro cargo	2,000 DWT -	n/a	5 <sup>(2)</sup>		20		30
ship <sup>(3)</sup>	1,000 - 2,000 DWT	n/a	0-5(1)(2)		0-20(1)		0-30(1)
Ro-ro	1000 DWT-	n/a	5(2)		20		30
passenger ship <sup>(3)</sup>	250 - 1,000 DWT	n/a	0-5(1)(2)		0-20(1)		0-30 <sup>(1)</sup>
Cruise	85,000 GT -	n/a	5 (2)	<u>20</u>	<del>20</del>	<u>30</u>	<del>30</del>
passenger ship having non-conventio nal propulsion <sup>(3)</sup>	25,000 - 85,000 GT	n/a	0-5 <sup>(1) (2)</sup>	0-20(1)	<del>0-20-<sup>(1)</sup></del>	0-30(1)	<del>0 30 <sup>(1)</sup></del>

#### Notes:

- 1 Reduction factor to be linearly interpolated between the two values dependent upon vessel size. The lower value of the reduction factor is to be applied to the smaller ship size.
- 2 Phase 1 commences for those ships on 1 September 2015.
- 3 Reduction factor applies to those ships delivered on or after 1 September 2019, as defined in paragraph 43 of regulation 2.

Table 8-9 has been amended as follows.

Table 8-9 Parameters for Determination of Reference Values for Different Ship Types

	Ship type defined in <b>3.1.2</b>	а	b	c
(4)	Bulk carrier	961.79	<ul> <li>(i) Deadweight of the ship (referred to as "DWT" hereinafter in this table) where DWT ≤ 279,000</li> <li>(ii) 279,000 where DWT &gt; 279,000</li> </ul>	0.477
(5)	Gas carrier	1120.00		0.456
(6)	Tanker	1218.80		0.488
(7)	Container carrier	174.22		0.201
(8)	General cargo ship	107.48		0.216
(9)	Refrigerated cargo carrier	227.01	DWT	0.244
(10)	Combination carrier	1219.00	<u>DW1</u>	0.488
(12)	Ro-ro cargo ship (vehicle carrier)	(DWT/GT) $^{-0.7}$ ×780.36 where DWT/GT < 0.3, 1812.63 where DWT/GT $\geq$ 0.3		0.471
(13)	Ro-ro cargo ship	1405.15	DWT	
		1686.17 <sup>(1)</sup>	<ul> <li>(i) DWT where DWT ≤ 17,000<sup>(1)</sup></li> <li>(ii) 17,000 where DWT &gt; 17,000<sup>(1)</sup></li> </ul>	0.498
(14)	Ro-ro passenger ship	752.16	DWT	
		902.59(1)	<ul> <li>(i) DWT where DWT ≤ 10,000<sup>(1)</sup></li> <li>(ii) 10,000 where DWT &gt;10,000<sup>(1)</sup></li> </ul>	0.381
(17)	LNG carrier	2253.7	DWT	0.474
(18)	Cruise passenger ship having non-conventional propulsion	170.84	Gross tonnage of the ship (GT)	0.214

#### Note:

#### EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 April 2022.

To be used from Phase 2 and thereafter. These values, however, may also be applied to Phase 1 in cases where deemed appropriate by the Society.

# GUIDANCE

# GUIDANCE FOR MARINE POLLUTION PREVENTION SYSTEMS

#### 2021 AMENDMENT NO.1

Notice No.59 27 December 2021 Resolved by Technical Committee on 28 July 2021

#### Notice No.59 27 December 2021 AMENDMENT TO THE GUIDANCE FOR MARINE POLLUTION PREVENTION SYSTEMS

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

#### Part 2 SURVEYS

#### **Chapter 1 GENERAL**

#### 1.1 General

#### 1.1.3 Intervals of Surveys

Sub-paragraph -2(9) has been added as follows.

- 2 Occasional surveys specified in 1.1.3-5(3), Part 2 of the Rules are to be in accordance with the followings:
- (9) Sampling points for representative sample (in-use samples) of fuel oil

  For ships subject to 2.2.2, Part 8 of the Rules and which were at the beginning stage of their construction on or before 1 April 2022, a survey is to be carried out to verify compliance with the fitting or designating of sampling points specified in 2.2.2-1, Part 8 of the Rules by the first Special Survey carried out on or after 1 April 2023.

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

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

Section 2.2 has been amended as follows.

- 2.2 Sulphur Oxides (SOx) and Particulate Matter (Regulation 14 of Annex VI)
- **2.2.1** Fuel Oil Change-over on Ship Operating in SOx Emission Control Areas (*Regulation*14-of Annex VI) (Omitted)

#### 2.2.2 In-use fuel oil sampling points

- <u>1</u> The wording "deemed necessary by the Society" in **2.2.2-1** and **-2, Part 8 of the Rules** means all ships deemed necessary by the Administration.
- 2 The wording "guidelines deemed appropriate by the Society" in 2.2.2-1, Part 8 of the Rules means the "2019 Guidelines for On Board Sampling for the Verification of the Sulphur Content of the Fuel Oil Used On Board Ships (MEPC.1/Circ.864/Rev.1, as amended)".

#### **Chapter 3 ENERGY EFFICIENCY FOR SHIPS**

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

Sub-paragraphs -3 and -4 have been amended as follows.

- 1 In **Table 8-8, Part 8 of the Rules**, a "ship corresponding to Phase 0" refers to the following new ships:
- (1) a ship for which the building contract is placed in Phase 0, and the delivery of which is before 1 January 2019; or
- (2) a ship for which the building contract is placed before 1 January 2013, and the delivery of which is on or after 1 July 2015 and before 1 January 2019; or
- (3) in the absence of a building contract, the ships referred to in the following (a) or (b):
  - (a) a ship at beginning stage of construction on or after 1 July 2013 and before 1 July 2015, and the delivery of which is before 1 January 2019; or
  - (b) a ship at beginning stage of construction before 1 July 2013, and the delivery of which is on or after 1 July 2015 and before 1 January 2019.
- 2 In **Table 8-8, Part 8 of the Rules**, a "ship corresponding to Phase 1" refers to the following new ships:
- (1) a ship for which the building contract is placed in Phase 1, and the delivery of which is before

- 1 January 2024; or
- (2) a ship for which the building contract is placed before 1 January 2015, and the delivery of which is on or after 1 January 2019 and before 1 January 2024; or
- (3) in the absence of a building contract, the ship referred to in the following (a) or (b):
  - (a) a ship at beginning stage of construction on or after 1 July 2015 and before 1 July 2020, and the delivery of which is before 1 January 2024; or
  - (b) a ship at beginning stage of construction before 1 July 2015, and the delivery of which is on or after 1 January 2019 and before 1 January 2024.
- 3 In **Table 8-8, Part 8 of the Rules**, a "ship corresponding to Phase 2" refers to the following new ships:
- (1) For ship types where Phase 2 ends on 31 March 2022:
  - (a) a ship for which the building contract is placed in Phase 2, and the delivery of which is before 1 April 2026; or
  - (b) a ship for which the building contract is placed before 1 January 2020, and the delivery of which is on or after 1 January 2024 and before 1 April 2026; or
  - (c) in the absence of a building contract, the ship referred to in the following (i) or (ii):
    - i) a ship at beginning stage of construction on or after 1 July 2020 and before 1 October 2022, and the delivery of which is before 1 April 2026; or
    - ii) a ship at beginning stage of construction before 1 July 2020, and the delivery of which is on or after 1 January 2024 and before 1 April 2026.
- (2) For ship types where Phase 2 ends on 31 December 2024:
  - $(\frac{1}{2})$  a ship for which the building contract is placed in Phase 2, and the delivery of which is before 1 January 2029; or
  - (<u>3b</u>) a ship for which the building contract is placed before 1 January 2020, and the delivery of which is on or after 1 January 2024 and before 1 January 2029; or
  - (3c) in the absence of a building contract, the ship referred to in the following (ai) or (bii):
    - (ai) a ship at beginning stage of construction on or after 1 July 2020 and before 1 July 2025, and the delivery of which is before 1 January 2029; or
    - (bii) a ship at beginning stage of construction before 1 July 2020, and the delivery of which is on or after 1 January 2024 and before 1 January 2029.
- 4 In **Table 8-8, Part 8 of the Rules**, a "ship corresponding to Phase 3" refers to the following new ships:
- (1) For ship types where Phase 3 commences with 1April 2022 and onwards:
  - (a) a ship for which the building contract is placed in Phase 3; or
  - (b) a ship for which the building contract of which is placed before Phase 3, and the delivery is on or after 1 April 2026; or
  - (c) in the absence of a building contract, the ship referred to in the following (i) or (ii):
    - i) a ship at beginning stage of construction on or after 1 October 2022; or
    - ii) a ship at beginning stage of construction before 1 October 2022, and the delivery of which is on or after 1 April 2026.
- (2) For ship types where Phase 3 commences with 1 January 2025 and onwards:
  - $(\pm \underline{a})$  a ship for which the building contract is placed in Phase 3; or
  - (b) a ship for which the building contract of which is placed before Phase 3, and the delivery is on or after 1 January 2029; or
  - (c) in the absence of a building contract, the ship referred to in the following (i) or (ii):
    - (2i) in the absence of a building contract, a ship at beginning stage of construction or after 1 July 2025; or
    - (3ii) a ship at beginning stage of construction before 1 July 2025, and the delivery of which is on or after 1 January 2029.

- (Omitted) (Omitted) **5 6**

#### EFFECTIVE DATE AND APPLICATION

The effective date of the amendments is 1 April 2022. 1.