CIRCULAR LETTER No. 313-04-1711c dated 01.03.2022

Re: amendments to the Guidelines on the Application of Provisions of the International Convention MARPOL 73/78, 2022, ND No. 2-030101-049-E in connection with coming into force of IMO resolution MEPC.324(75)

Item(s) of supervision:
ships under construction and in service

Entry-into-force date:
01.04.2022

Cancels / amends / adds Circular Letter No. dated

Number of pages: 1+11

Appendices:
Appendix 1: information on amendments introduced by the Circular Letter
Appendix 2: text of amendments to Part II "Ship's Construction, Equipment and Arrangements for the Prevention of Pollution by Oil" and Part VI "Ship's Equipment and Arrangements for the Prevention of Air Pollution"

Director General Konstantin G. Palnikov

Text of CL:
We hereby inform that in connection with coming into force of IMO resolution MEPC.324(75) on 1 April 2022 as well as considering new revision of IMO circular MEPC.1/Circ.795/Rev.5, IMO resolution MEPC.332(76) and the experience of technical supervision, the Guidelines on the Application of Provisions of the International Convention MARPOL 73/78 shall be amended as specified in the Appendices to the Circular Letter.

It is necessary to do the following:
1. Bring the content of the Circular Letter to the notice of the RS surveyors, interested organizations and persons in the area of the RS Branch Offices' activity.
2. Apply the provisions of the Circular Letter during review and approval of the technical documentation on ships under construction and in service starting from 01.04.2022 unless otherwise specified in Table 2.6.4 and in relevant paras of the above Guidelines.

List of the amended and/or introduced paras/chapters/sections:
Part II: para 14.2;
Part VI: paras 1.2.1, 2.2.3 — 2.2.12, 2.3.2, 2.3.5 — 2.3.9, 2.6.3, Table 2.6.4, paras 2.6.5.3, 2.6.5.4 and Table 2.6.6

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"Thesis" System No. 22-13052
# Information on amendments introduced by the Circular Letter

(for inclusion in the Revision History to the RS Publication)

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<th>Amended paras/chapters/sections</th>
<th>Information on amendments</th>
<th>Number and date of the Circular Letter</th>
<th>Entry-into-force date</th>
</tr>
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<td>1</td>
<td>Part II, para 14.2</td>
<td>Requirements have been specified considering regulation 39.3 of Annex I to MARPOL 73/78</td>
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<tr>
<td>2</td>
<td>Part VI, para 1.2.1</td>
<td>Definition &quot;Major (substantial) conversion&quot; and has been specified. In the definition &quot;Identical engine&quot; the reference to IMO circular MEPC.1/Circ.795/Rev.2 has been replaced by the reference to IMO circular MEPC.1/Circ.795/Rev.5. New definitions &quot;In-use sample&quot;, &quot;Onboard sample&quot;, &quot;MARPOL delivered sample&quot;, &quot;Sulphur content of fuel oil&quot; and &quot;Low-flashpoint fuel&quot; have been introduced considering IMO resolution MEPC.324(75)</td>
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<td>Part VI, para 2.2.3</td>
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<td>11</td>
<td>Part VI, para 2.3.9</td>
<td>New para containing requirements that take into account IMO resolution MEPC.324(75) has been introduced</td>
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<td>13</td>
<td>Part VI, Table 2.6.4</td>
<td>Para has been amended considering IMO resolution MEPC.324(75)</td>
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<td>17</td>
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GUIDELINES ON THE APPLICATION OF PROVISIONS OF THE INTERNATIONAL CONVENTION MARPOL 73/78, 2022,

ND No. 2-030101-049-E

PART II. SHIP’S CONSTRUCTION, EQUIPMENT AND ARRANGEMENTS FOR THE PREVENTION OF POLLUTION BY OIL

14 APPLICATION OF THE REQUIREMENTS OF ANNEX I TO MARPOL 73/78 FOR MODU, FOP AND FPU

1 Para 14.2 is replaced by the following text:

"14.2 At survey for compliance with Annex I to MARPOL 73/78 in relation to FPU configured as FPSOs or FSUs in accordance with IMO resolution MEPC.311(73) "2018 Guidelines for the Application of MARPOL Annex I Requirements to Floating Production, Storage and Offloading Facilities (FPSOs) and Floating Storage Units (FSUs)", in addition to the requirements of regulation 39.2 of Annex I, the provisions of the above Resolution shall be taken into account."

PART VI. SHIP’S EQUIPMENT AND ARRANGEMENTS FOR THE PREVENTION OF AIR POLLUTION

1 GENERAL

2 Para 1.2.1. Definition "Major (substantial) conversion" is replaced by the following text:

"Major (substantial) conversion means, in relation to Chapter 4 of Annex VI to MARPOL 73/78, a conversion of a ship:
which substantially alters the dimensions, carrying capacity or engine power of the ship; or
which changes the type of the ship; or
the intent of which in the opinion of the Administration is substantially to prolong the life of the ship; or
which otherwise so alters the ship that, if it were a new ship, it would become subject to relevant provisions of MARPOL 73/78 not applicable to it as an existing ship; or
which substantially alters the energy efficiency of the ship and includes any modifications that could cause the ship to exceed the applicable required EEDI calculated in accordance with regulation 21 of Annex VI to MARPOL 73/78.

Assuming no alteration to the ship structure, both decrease of assigned freeboard and temporary increase of assigned freeboard due to the limitation of deadweight or draught at calling port shall not be construed as a major conversion. However, an increase of assigned freeboard, except a temporary increase, shall be construed as a major conversion (IMO circular MEPC.1/Circ.795/Rev.5).

In any case, it is the Administration’s authority to evaluate and decide whether an alteration shall be considered as major conversion in order to apply regulations on energy efficiency for ships. Terms "new/existing ship" specified in the definition "Major (substantial) conversion" shall be applied in a manner consistent with regulation 1.9.1.4 of Annex I to MARPOL 73/78."

In the definition "Identical engine" the reference to IMO circular MEPC.1/Circ.795/Rev.2 is replaced by the reference to IMO circular MEPC.1/Circ.795/Rev.5.
After the definition "New ship" the definitions "In-use sample", "Onboard sample" and "MARPOL delivered sample" are introduced reading as follows:

"In-use sample means a sample of fuel oil in use on a ship. Onboard sample means a sample of fuel oil intended to be used or carried for use on board that ship. MARPOL delivered sample means the sample of fuel oil delivered in accordance with regulation 18.8.1 of Annex VI to MARPOL 73/78."

After the definition "Cargo vapour collection system" the definition "Sulphur content of fuel oil" is introduced reading as follows:

"Sulphur content of fuel oil means the concentration of sulphur in a fuel oil, measured in % m/m as tested in accordance with a standard acceptable to IMO (ISO 8754:2003 "Petroleum products — Determination of sulphur content — Energy-dispersive X-ray fluorescence spectrometry")"

After the definition "Existing ship" the definition "Low-flashpoint fuel" is introduced reading as follows:

"Low-flashpoint fuel means gaseous or liquid fuel oil having a flashpoint lower than otherwise permitted under paragraph 2.1.1 of regulation 4 of Chapter II-2 of the International Convention for the Safety of Life at Sea, 1974 (SOLAS 74) as amended."

2 CONTROL OF EMISSIONS FROM SHIPS

Para 2.2.3 is replaced by the following text:

"2.2.3 For a major conversion involving 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 in regulation 13 of Annex VI to MARPOL 73/78 and in force at the time of replacement or addition of the engine shall apply.

In accordance with IACS UI MPC98 and IMO circular MEPC.1/Circ.795/Rev.5, the term "time of the replacement or addition of the engine" shall be taken as the date of:

.1 the contractual delivery date of the engine to the ship in the event the engine is fitted on board and tested for its intended purpose within six (6) months after the date specified in sub-paragraphs of regulation 13.5.1.2, Annex VI to MARPOL 73/78 as applicable; or

.2 in the absence of a contractual delivery date, the actual delivery date of the engine to the ship in the event the engine is fitted on board and tested for its intended purpose within six (6) months after the date specified in sub-paragraphs of regulation 13.5.1.2, Annex VI to MARPOL 73/78, provided that the date is confirmed by a delivery receipt; or

.3 the actual date that the engine is tested on board for its intended purpose in the event the engine is fitted on board and tested for its intended purpose on or after six (6) months from the date specified in sub-paragraphs of regulation 13.5.1.2, Annex VI to MARPOL 73/78 as applicable.

The above dates are the dates of major conversion and shall be entered in the Supplement to IAPP Certificate (form 2.4.23) — para 2.2.1, table, item 8.a, line "13.2.1.1 & 13.2.2"."
"2.2.4 If the engine delivery contract is concluded before the date specified in sub-paragraphs of regulation 13.5.1.2 of Annex VI to MARPOL 73/78, as appropriate, or if, in the absence of a contractual delivery date, the engine is delivered on board (the delivery date is confirmed by a delivery receipt) before that date, but not tested within six (6) months after the date specified in sub-paragraphs of regulation 13.5.1.2, due to unforeseen circumstances beyond the control of the shipowner, then the "unforeseen delay in delivery" may be considered by the Administration in a manner similar to the provisions of paragraph 4 of the Unified Interpretations to MARPOL 73/78 Annex I.

2.2.5 In the case of replacement engines only (on the dates specified in sub-paragraphs of regulation 13.5.1.2 or in regulation 13.5.1.3 of Annex VI to MARPOL 73/78), if it is not possible for such a replacement engine to meet the standards set forth in regulation 13.5.1.1 of Annex VI to MARPOL 73/78 (Tier III), then that replacement engine shall meet the standards set forth in regulation 13.4 of Annex VI to MARPOL 73/78 (Tier II). The criteria of when it is not possible for replacement engine to meet the standards set forth in regulation 13.5.1.1 of Annex VI to MARPOL 73/78 are given in 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 (refer to IMO resolution MEPC.230(65)). The following criteria may be applied:

- a replacement engine of similar rating complying with Tier III is not commercially available; or
- the replacement engine, in order to be brought into Tier III compliance, needs to be equipped with a \(\text{NO}_x\) reducing device which due to:
  - size cannot be installed in the limited space available on board; or
  - extensive heat release could have adverse impact on the ships structure, sheeting, and/or equipment whilst additional ventilation and/or insulation of the engine-room/compartment will not be possible;
- the replacement engine cannot be installed due to its dimensions and weight, as well as due to the fact that it cannot be integrated with the ship components (drive shafts, reduction gears, propeller shafts, etc.), systems and equipment;
- adjustments of the replacement engine, which shall be equipped with the \(\text{NO}_x\) reducing device, do not allow the joint operation of the engine and this device;
- as well as other criteria indicated in IMO Guidelines mentioned above.

2.2.6 For a major conversion involving the replacement of a marine diesel engine with a non-identical marine diesel engine or the installation of an additional marine diesel engine on or after 1 January 2000 but before 1 July 2010 the provisions of IACS UI MPC20 (Rev.1 Apr 2014) shall apply.

To identify whether the engine is an identical engine, the Unified Interpretations according to IMO circular MEPC.1/Circ.795/Rev.5 shall be considered.".

Existing paras 2.2.4 — 2.2.9 are renumbered 2.2.7 — 2.2.12 accordingly.

Para 2.2.9 is replaced by the following text:

"2.2.12 The tier and on/off status of marine diesel engines installed on board a ship to which the EIAPP Certificates have been issued confirming that they are certified to both Tier II and Tier III or that they are certified to Tier III only shall be recorded in such logbook or electronic record book, as prescribed by the Administration, at entry into and exit from a \(\text{SO}_x\) Tier III emission control area, or when the on/off status changes within such an area, together with the date, time and position of the ship (IMO resolution MEPC.271(69)). When applying this requirement, the Unified Interpretations according to IMO circular MEPC.1/Circ.795/Rev.5 shall be considered.".

Para 2.3.2 is replaced by the following text:

"2.3.2 In accordance with regulation 14.4 of Annex VI to MARPOL 73/78, while a ship is operating within \(\text{SO}_x\) emission control area, the sulphur content of fuel oil used on board that ship shall not exceed 0.10 % m/m."
Ship fuel oil systems shall enable safe changeover of fuel oils with a required sulphur content prior to entry into SOx emission control area. The fuel oil service system shall be fully flushed of all kinds of fuel oils exceeding the applicable sulphur content. A written fuel changeover procedure shall be available on board the ship and the data in accordance with regulation 14.6 of Annex VI to MARPOL 73/78 shall be recorded in such logbook as prescribed by the Administration.

8 Paras 2.3.5 — 2.3.7 are replaced by the following text:

"2.3.5 For ships of 400 gross tonnage and above, and at the Administration's discretion, for ships of less than 400 gross tonnage (refer to IACS UI MPC29 (Rev.1 Apr 2014)), engaged in voyages to ports or offshore terminals under the jurisdiction of other Parties to MARPOL 73/78, and for MODU or other platforms regardless of their gross tonnage, engaged in voyages to waters under the jurisdiction of another Party to MARPOL 73/78, details of fuel oil delivered to and used on board shall be recorded by means of bunker delivery notes that shall be retained on board for a period of three years after the fuel oil has been delivered on board and shall be accompanied by a representative MARPOL delivered sample obtained at the receiving ship's inlet bunker manifold by one of the following methods:

.1 manual valve-setting continuous-drip sampling arrangement (sampler);
.2 time-proportional automatic sampling arrangement;
.3 flow-proportional automatic sampling arrangement.

2.3.6 The representative MARPOL delivered sample shall be retained under the ship's control until the fuel oil delivered is totally consumed, but in any case for a period of not less than 12 months from the time of bunkering.

2.3.7 Considering the above, fuel oil systems of ships indicated in 2.3.5 shall ensure the following:

.1 possibility to obtain representative MARPOL delivered samples as defined in regulation 2.2.54 of revised Annex VI to MARPOL 73/78 (IMO resolution MEPC.324(75)) at the receiving ship's inlet bunker manifold by means of the sampling arrangement according to IMO resolution MEPC.182(59);
.2 for a ship the keel of which is laid on or after 1 April 2022, the possibility to obtain the in-use sample as defined in regulation 2.2.55 of revised Annex VI to MARPOL 73/78 (IMO resolution MEPC.324(75)) from sampling points fitted or designated for these purposes taking into account IMO circular MEPC.1/Circ.864/Rev.1 "2019 Guidelines for on Board Sampling for the Verification of the Sulphur Content of the Fuel Oil Used on Board Ships";
.3 for a ship the keel of which is laid before 1 April 2022, the sampling point(s) referred to in 2.3.7.2 shall be fitted or designated not later than the first renewal survey on or after 1 April 2023."

9 New paras 2.3.8 and 2.3.9 are introduced reading as follows:

"2.3.8 If the competent authorities require the onboard sample as defined in regulation 2.2.56 of the revised Annex VI to MARPOL 73/78 (IMO resolution MEPC.324(75)) to be analysed, it shall be done in accordance with IMO circular MEPC.1/Circ.889 "2020 Guidelines for on Board Sampling of Fuel Oil Intended to be Used or Carried for Use on Board a Ship".

2.3.9 The procedure and methods of fuel oil verification to determine whether the fuel oil meets the requirements of Annex VI to MARPOL 73/78 are set forth in detail in revised Appendix VI "Verification procedures for a MARPOL Annex VI fuel oil sample (regulation 18.8.2 or regulation 14.8)" to Annex VI to MARPOL 73/78."

10 Para 2.6.3 is replaced by the following text:

"2.6.3 The attained and required EEDI shall apply only to the above mentioned ships of the types specified therein, namely:
bulk carrier;
gas carrier (a cargo ship, other than an LNG carrier, intended for the carriage in bulk of any liquefied gas);
LNG carrier (a cargo ship intended for the carriage in bulk of liquefied natural gas (LNG)) having conventional or non-conventional propulsion, delivered on or after 1 September 2019;"
tanker (an oil tanker, chemical tanker or tanker intended for the carriage of noxious liquid substances in bulk (NLS tanker));
container ship;
general cargo ship;
ship designed exclusively for the carriage of refrigerated cargoes in holds, including the ship dedicated to the carriage of fruit juice in refrigerated cargo tanks (refrigerated cargo carrier);
combination carrier;
passenger ship (a ship which carries more than 12 passengers), no required EEDI applies;
cruise passenger ships having non-conventional propulsion, delivered on or after 1 September 2019. From 1 September 2015 for cruise passenger ships having conventional propulsion only the attained EEDI applies;
ro-ro cargo ship, delivered on or after 1 September 2019. For ro-ro cargo ships delivered before this date only the attained EEDI applies;
ro-ro passenger ship, delivered on or after 1 September 2019. For ro-ro passenger ships delivered before this date only the attained EEDI applies.

The above requirements for attained or required EEDI shall not apply to cargo ships having ice-breaking capability as well as to ships which have non-conventional propulsion, except that these requirements shall apply to cruise passenger ships and LNG carriers as specified above.

From 1 October 2020, the above requirements for EEDI shall not apply to category A ships as defined in the Polar Code, as well as to ships having non-conventional propulsion except for cruise passenger ships and LNG carriers.

The attained EEDI shall be calculated by the formula contained in the 2018 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for New Ships given in IMO resolution MEPC.308(73), as amended by IMO resolutions MEPC.322(74) and MEPC.332(76).

For each ship subject to regulation 21 of Annex VI to MARPOL 73/78 on required EEDI, the Administration or any organization duly authorized by it shall report to IMO the required and attained EEDI values and relevant information, taking into account IMO resolution MEPC.332(76), via a standardized reporting format specified in this resolution or electronic communication within 7 months of completing the surveys required under 2.1.7 of Part I "Regulations for Technical Supervision", or for ships delivered prior to 1 April 2022, within 7 months following 1 April 2022."

11 Table 2.6.4 is replaced by the following text:

"Table 2.6.4

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<thead>
<tr>
<th>Type of ship</th>
<th>Deadweight, DWT/ Gross tonnage, GT</th>
<th>Phase 0 1 Jan 2013 — 31 Dec 2014</th>
<th>Phase 1 1 Jan 2015 — 31 Dec 2019</th>
<th>Phase 2 1 Jan 2020 — 31 Mar 2022</th>
<th>Phase 2 1 Jan 2020 — 31 Dec 2024</th>
<th>Phase 3 1 Apr 2022 and onwards</th>
<th>Phase 3 1 Jan 2025 and onwards</th>
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<tr>
<td>Bulk carrier</td>
<td>20000 DWT and above</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
</tr>
<tr>
<td></td>
<td>10000 and above but less than 20000 DWT</td>
<td>N/A</td>
<td>0 — 10'</td>
<td>0 — 20'</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
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<tr>
<td>Gas carrier</td>
<td>15000 DWT and above</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
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<tr>
<td></td>
<td>10000 and above but less than 15000 DWT</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
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<td></td>
<td>2000 DWT and above but less than 10000</td>
<td>N/A</td>
<td>0 — 10'</td>
<td>0 — 20'</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
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<tr>
<td>Tanker</td>
<td>20000 DWT and above</td>
<td>0</td>
<td>10</td>
<td>20</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
<td>0 — 30'</td>
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<td>4000 and above but less than 20000 DWT</td>
<td>N/A</td>
<td>0 — 10'</td>
<td>0 — 20'</td>
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<td>0 — 30'</td>
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<td>Container ship</td>
<td>200000 DWT and above</td>
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<td>10</td>
<td>20</td>
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<td>50</td>
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<tr>
<td>Type of ship</td>
<td>Deadweight, DWT/ Gross tonnage, GT</td>
<td>Phase 0 1 Jan 2013 — 31 Dec 2014</td>
<td>Phase 1 1 Jan 2015 — 31 Dec 2019</td>
<td>Phase 2 1 Jan 2020 — 31 Mar 2022</td>
<td>Phase 2 1 Jan 2020 — 31 Dec 2024</td>
<td>Phase 3 1 Apr 2022 and onwards</td>
<td>Phase 3 1 Jan 2025 and onwards</td>
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<td>120000 and above but less than 200000 DWT</td>
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<td>40</td>
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<td>40000 and above but less than 80000 DWT</td>
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<tr>
<td>10000 and above but less than 15000 DWT</td>
<td>N/A 0 — 10⁴ 0 — 20¹ 15 — 30³</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>General cargo ship</td>
<td>15000 DWT and above</td>
<td>0 10 15</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3000 and above but less than 15000 DWT</td>
<td>N/A 0 — 10⁴ 0 — 15¹</td>
<td>—</td>
<td>0 — 30³</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Refrigerated cargo carrier</td>
<td>5000 DWT and above</td>
<td>0 10 15</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3000 and above but less than 5000 DWT</td>
<td>N/A 0 — 10⁴ 0 — 15¹</td>
<td>—</td>
<td>0 — 30³</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Combination carrier</td>
<td>20000 DWT and above</td>
<td>0 10 20</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4000 and above but less than 20000 DWT</td>
<td>N/A 0 — 10⁴ 0 — 20¹ 0 — 30¹</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>LNG carrier²</td>
<td>10000 DWT and above</td>
<td>N/A 10³ 20</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Ro-ro cargo ship (vehicle carrier)²</td>
<td>10000 DWT and above</td>
<td>N/A 5³ 15</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Ro-ro cargo ship²</td>
<td>2000 DWT and above</td>
<td>N/A 5³ 20</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1000 and above but less than 2000 DWT</td>
<td>N/A 0 — 5¹ ³ 0 — 20³ ³ 30¹</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Ro-ro passenger ship²</td>
<td>1000 DWT and above</td>
<td>N/A 5³ 20</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>250 and above but less than 1000 DWT</td>
<td>N/A 0 — 5¹ ³ 0 — 20³ ³ 30¹</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Cruise passenger ship²</td>
<td>85000 GT and above</td>
<td>N/A 5³ 20</td>
<td>—</td>
<td>30</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>25000 and above but less than 85000 GT</td>
<td>N/A 0 — 5¹ ³ 0 — 20³ ³ 30¹</td>
<td>—</td>
<td>—</td>
<td>—</td>
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</tr>
</tbody>
</table>

¹ Reduction factor X shall be linearly interpolated between the two values dependent upon vessel size. The lower value of the reduction factor X shall be applied to the smaller ship size.
² Reduction factor applies to those ships delivered on or after 1 September 2019.
³ Phase 1 commences for those ships on 1 September 2015.

Note: N/A means that no required EEDI applies.

12 Para 2.6.5.3 is replaced by the following text:

"2.6.5.3 The reduction factor X of Phase 2 is applied to the following new ships:"
for ship types where Phase 2 ends on 31 March 2022:
.1 the building contract of which is placed in Phase 2, and the delivery is before 1 April 2026; or
.2 the building contract of which is placed before Phase 2, and the delivery is on or after 1 January 2024 and before 1 April 2026; or
in the absence of a building contract:
.3 the keel of which is laid or which are at a similar stage of construction on or after 1 July 2020 and before 1 October 2022, and the delivery is before 1 April 2026; or
.4 the keel of which is laid or which are at a similar stage of construction before 1 July 2020, and the delivery is on or after 1 January 2024 and before 1 April 2026;
for ship types where Phase 2 ends on 31 December 2024:
.5 the building contract of which is placed in Phase 2, and the delivery is before 1 January 2029; or
.6 the building contract of which is placed before Phase 2, and the delivery is on or after 1 January 2024 and before 1 January 2029; or
in the absence of a building contract:
.7 the keel of which is laid or which are at a similar stage of construction on or after 1 July 2020 and before 1 July 2025, and the delivery is before 1 January 2029; or
.8 the keel of which is laid or which are at a similar stage of construction before 1 July 2020, and the delivery is on or after 1 January 2024 and before 1 January 2029.

Para 2.6.5.4 is replaced by the following text:

"2.6.5.4 The reduction factor \( X \) of Phase 3 is applied to the following new ships:
for ship types where Phase 3 commences with 1 April 2022 and onwards:
.1 the building contract of which is placed in Phase 3; or
.2 the building contract of which is placed before Phase 3, and the delivery is on or after 1 April 2026; or
in the absence of a building contract:
.3 the keel of which is laid or which are at a similar stage of construction on or after 1 October 2022; or
.4 the keel of which is laid or which are at a similar stage of construction before 1 October 2022 and the delivery of which is on or after 1 April 2026;
for ship types where Phase 3 commences with 1 January 2025 and onwards:
.5 the building contract of which is placed in Phase 3; or
.6 the building contract of which is placed before Phase 3, and the delivery is on or after 1 January 2029; or
in the absence of a building contract:
.7 the keel of which is laid or which are at a similar stage of construction on or after 1 July 2025; or
.8 the keel of which is laid or which are at a similar stage of construction before 1 July 2025 and the delivery of which is on or after 1 January 2029."

Table 2.6.6. Line with the type of ship "Bulk carrier" is replaced by the following text:

<table>
<thead>
<tr>
<th>Type of ship</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk carrier</td>
<td>961,79</td>
<td>Deadweight (DWT) of the ship, where DWT ≤ 279000 or 279000, where DWT &gt; 279000</td>
</tr>
<tr>
<td></td>
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</tr>
</tbody>
</table>
INSTRUCTIONS ON THE IMPLEMENTATION OF REVISED ANNEX V TO MARPOL 73/78

5 GARBAGE STORAGE

Last paragraph is deleted.