附件 3

第 MEPC.385(81)号决议
(2024 年 3 月 22 日通过)

修正《经 1978 年议定书修订的 1973 年国际防止船舶造成污染公约》的 1997 年议定书附则的修正案

《防污公约》附则 VI 修正案

(低闪点燃料和其他燃油相关问题，船用柴油机替代蒸汽系统，获取国际海事组织船舶燃油消耗数据库(IMO DCS)的数据以及增加运输工作的数据和加强的粒度水平)

海上环境保护委员会，

忆及《国际海事组织公约》关于防止和控制船舶造成海洋污染国际公约赋予海上环境保护委员会(本委员会)职能的第 38(a)条，

还忆及经 1978 年和 1997 年议定书修订的《1973 年国际防止船舶造成污染公约》(《防污公约》)规定了修正程序并赋予本组织适当机构审议并由缔约国通过其修正案职能的第 16 条，

在其第八十一届会议上，**审议了**按照《防污公约》第 16(2)(a)条散发的关于低闪点燃料和其他燃油相关问题，船用柴油机替代蒸汽系统，获取国际海事组织船舶燃油消耗数据库(IMO DCS)的数据以及增加运输工作的数据和加强的粒度水平的《防污公约》附则 VI 的建议修正案，

1 按《防污公约》第 16(2)(d)条，**通过**《防污公约》附则 VI 修正案，其文本载于本决议附件；

2 按《防污公约》第 16(2)(f)(iii)条，**决定**该修正案应于 2025 年 2 月 1 日被视为获得接受，除非在此日期之前，有不少于三分之一的缔约国或拥有合计商船总吨位不少于世界商船总吨位 50%的缔约国，已通知本组织其反对该修正案；

3 **提请**各缔约国注意，按《防污公约》第 16(2)(g)(ii)条，该修正案在按上述第 2 段获得接受后，应于 2025 年 8 月 1 日生效；

4 **还提请**各缔约国考虑自 2025 年 1 月 1 日起提早适用关于提交给国际海事组织船舶燃油消耗数据库的资料的附录 IX 的修正案；

5 **要求**秘书长，按《防污公约》第 16(2)(e)条，将本决议及其附件中所载修正案文本的核正无误副本送交《防污公约》所有缔约国；

6 **还要求**秘书长将本决议及其附件的副本送交非《防污公约》缔约国的本组织各会员。

附件

《防污公约》附则VI修正案

(低闪点燃料和其他燃油相关问题，船用柴油机替代蒸汽系统，获取国际海事组织船舶燃油消耗数据库(IMO DCS)的数据以及增加运输工作的数据和加强的粒度水平)

第2条

定义

1 第1.14款由以下替换：

"1.14 *燃油*系指交付到船上并拟在船上使用的任何燃料。"

2 现有第1.32款后插入新的第1.33款如下：

"1.33 *气体燃料*系指当温度为 37.8°C 时其蒸气压力超过 0.28 MPa(绝对压力)的一种燃油。*"

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* 参见*《国际使用气体或其他低闪点燃料船舶安全规则》(《国际气体燃料规则》)*第 2.2.18 段。

第13条

氮氧化物(NO_x)

重大改装

3 第2.2款由以下替换：

"2.2 如重大改装涉及船用柴油机被非完全相同的柴油机替代，或涉及新增安装柴油机，则在替代或新增柴油机时本条标准须适用。就本条而言，安装船用柴油机替代蒸汽系统须视为更换柴油机。仅对替代柴油机而言，如其不能符合本条第 5.1.1 款所述标准(III 级，如适用)，则该替代柴油机须符合本条第 4 款所述标准(II 级)，并考虑到本组织制定的导则*。如果按照本款规定已在 2025 年 8 月 1 日或以后安装的是 II 级而不是 III 级替代柴油机，则缔约国须通知本组织。

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* 参见*《2024 年<防污公约>附则 VI 第 13.2.2 条要求的关于不要求满足第 III 级限值的非完全相同的替代柴油机导则》*(第 MEPC.386(81)号决议)。

第14条

硫氧化物(SO_x)和颗粒物质

4 第12款由以下替换：

“12 以上第 10 和 11 款的要求不适用于用于低闪点燃料或气体燃料的燃油服务系统。”

第18条

燃油可获得性和质量

5 第3款的现有段首由以下替换：

“3 交付到本附则适用的船上并在船上使用的燃油须符合下列要求：”

6 第3.2款的现有段首由以下替换：

“3.2 以石油精炼之外的方法得到的燃油不得：”

7 第4款由以下替换：

“4 本条不适用于固态煤或核燃料。本条第5.1、8.1和8.2款不适用于低闪点燃料或气体燃料。”

8 第 5 款由以下第 5.1 和 5.2 款替换：

“5.1 对受本附则第 5 和 6 条约束的每艘船舶，须以燃油装舱单的方式对交付并作为船上使用的燃油的细节加以记录，该装舱单须至少包含本附则附录 V 中规定的资料。

5.2 对受本附则第 5 和 6 条约束的每艘船舶，须以燃油装舱单的方式对交付并作为船上使用的低闪点燃料或气体燃料的细节加以记录，该装舱单须至少包含本附则附录 V 第 1 至 6 项中规定的资料，通过适于燃料类型的试验方法测定的密度以及相关的温度，以及由燃油供应商的代表签署并证明该燃油符合本条第 3 款的声明。此外，交付给船舶的专供船上使用的低闪点燃料或气体燃料的硫含量，须由供应商在燃油装舱单上注明，注明方式可以是用适合燃料类型的试验方法测定的实际值，也可以是经供应港口适当的当局同意，声明用此种方法测试的硫含量小于 0.001% m/m。”

9 第9.2款由以下替换：

“.2 要求当地供应商提供本条要求的燃油装舱单和《防污公约》交付的样品(如适用)，并由燃油供应商书面证明该燃油符合本附则第14和18条的要求；”

第27条

收集和报告船舶燃油消耗数据

10 现有第13款后新增第14和15款如下：

"14 本组织秘书长可按照严格的保密规则，临时与分析咨询机构和研究实体共享数据。

15 应一公司请求，本组织秘书长应以非匿名形式向公众提供该公司所属船舶的燃油消耗报告。"

附录I

国际防止空气污染(IAPP)证书格式(第 8 条)

11 第2.3.5段由以下替换：

"按照第14.12条，按第14.10或14.11条安装或指定取样点的要求不适用于用于低闪点燃料或气体燃料的燃油服务系统.....□"

附录IX

提交给国际海事组织船舶燃油消耗数据库的信息(第 27 条)

12 附录 IX 由以下替换：

"附录 IX

提交给国际海事组织船舶燃油消耗数据库的信息
(第 27 条)

船舶识别号

IMO 编号.....

每日历年数据提交的起止日期

起始日期(年/月/日) .....

终止日期(年/月/日) .....

船舶的技术参数

交船年份 .....

本附则第 2.2 条或其他规定(请列明)定义的船型 .....

总吨位(GT)[1] .....

净吨位(NT)[2].....

载重吨(DWT)[3] .....

主机和大于 130kW 的往复式内燃机副机输出功率(额定功率)[4] (以 kW 标明).....

达到的 EEDI[5] (如适用).....

达到的 EEXI[6] (如适用).....

冰级[7] .....

燃油消耗数据

按燃油类型[5]的燃油总消耗，以公吨计，和用于收集燃油消耗数据的方法：.....

按每种消耗设备类型消耗的燃油类型[5]的燃油总消耗，以公吨计，和用于收集燃油消耗数据的方法：

主机：.....
辅机/发电机：.....
燃油锅炉：.....
其他(请注明)：.....

船舶非航行时，按每种消耗设备消耗的燃油类型[5]的燃油消耗，以公吨计，和用于收集燃油消耗数据的方法：

主机：.....
辅机/发电机：.....
燃油锅炉：.....
其他(请注明)：.....

总航行距离(nm).....

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1 总吨位须按照《1969 年国际船舶吨位丈量公约》计算。

2 净吨位须按照《1969 年国际船舶吨位丈量公约》计算。如不适用，标注“N/A”。

3 载重吨系指船舶在相对密度为 1,025 kg/m^3 的水中，在夏季载重吃水的排水量和空船重量之间的吨数差。夏季载重吃水应取主管机关或经其认可组织批准的稳性手册中核准的最大夏季吃水。如不适用，标注“N/A”。

4 额定功率指发动机铭牌上标注的最大连续输出功率。

5 参见*《2022 年新造船达到的能效设计指数(EEDI)计算方法导则》*(第 MEPC.364(79)号决议)。

6 参见*《2022 年现有船舶达到的能效指数(EEXI)计算方法导则》*(第 MEPC.350(78)号决议)。

7 冰级应与《国际极地水域营运船舶规则》(《极地规则》)(第 MEPC.264(68)和 MSC.385(94)号决议)中的定义一致。如不适用，标注“N/A”。

满载航行距离(nm)(自愿).....
在航时长 .....
岸电供应总量(kWh).....

《防污公约》附则 VI 第 28 条适用的船舶

总运输工作.....

适用的 CII[8]： ☐AER ☐cgDIST

要求的年度营运 CII[9] .....

修正之前达到的年度营运 CII[10].....

达到的年度营运 CII[11].....

安装创新技术[12]，如适用： ☐A ☐B-1 ☐B-2 ☐C-1 ☐C-2

营运碳强度评级：[13] ☐A ☐B ☐C ☐D ☐E

试用 CII (自愿)：[14]

☐ EEPI (克-CO_2/吨-海里)： .....

☐ cbDIST (克-CO_2/泊位-海里)： .....

☐ clDIST (克-CO_2/质量-海里)： .....

☐ EEOI (克-CO_2/吨-海里)：[15] .....”

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8 参见*《2022 年营运碳强度指标和计算方法导则》(CII 导则，G1)*(第 MEPC.352(78)号决议)。

9 参见*《2022 年营运碳强度指标基线导则》(CII 基线导则，G2)*(第 MEPC.353(78)号决议)和*《2021 年相对于基线的营运碳强度折减系数导则》(CII 折减率导则，G3)*(第 MEPC.338(76)号决议)。

10 在使用*《2022 年 CII 计算的修正系数和航次调整临时导则》*(G5)(第 MEPC.355(78)号决议)修正之前，按照*《2022 年营运碳强度指标和计算方法导则》(CII 导则，G1)*(第 MEPC.352(78)号决议)计算。

11 按照*《2022 年营运碳强度指标和计算方法导则》(CII 导则，G1)*(第 MEPC.352(78)号决议)计算，并考虑到*《2022 年 CII 计算的修正系数和航次调整临时导则》*(G5)(第 MEPC.355(78)号决议)进行了修正。

12 参见*《2021 年用于计算和验证达到的 EEDI 和 EEXI 的创新型能效技术处理指南》*(第 MEPC.1/Circ.896 号通函)。

13 参见*《2022 年船舶营运碳强度评级导则》(CII 评级导则，G4)*(第 MEPC.354(78)号决议)。

14 参见*《2022 年营运碳强度指标和计算方法导则》(CII 导则，G1)*(第 MEPC.352(78)号决议)。

15 参见*《船舶能效营运指数(EEOI)自愿使用导则》*(第 MEPC.1/Circ.684 号通函)。

ANNEX 3

RESOLUTION MEPC.385(81)
(adopted on 22 March 2024)

AMENDMENTS TO THE ANNEX OF THE PROTOCOL OF 1997 TO AMEND THE INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973, AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO

Amendments to MARPOL Annex VI

(Low-flashpoint fuels and other fuel oil related issues, marine diesel engine replacing steam system, accessibility of data and inclusion of data on transport work and enhanced granularity in the IMO Ship Fuel Consumption Database (IMO DCS))

THE MARINE ENVIRONMENT PROTECTION COMMITTEE,

RECALLING Article 38(a) of the Convention on the International Maritime Organization concerning the functions of the Marine Environment Protection Committee conferred upon it by international conventions for the prevention and control of marine pollution from ships,

RECALLING ALSO article 16 of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocols of 1978 and 1997 relating thereto (MARPOL), which specifies the amendment procedure and confers upon the appropriate body of the Organization the function of considering amendments thereto for adoption by the Parties,

HAVING CONSIDERED, at its eighty-first session, proposed amendments to MARPOL Annex VI concerning low-flashpoint fuels and other fuel oil related issues, marine diesel engine replacing a steam system, and accessibility of data and inclusion of data on transport work and enhanced granularity in the IMO Ship Fuel Consumption Database (IMO DCS), which were circulated in accordance with article 16(2)(a) of MARPOL,

1 ADOPTS, in accordance with article 16(2)(d) of MARPOL, amendments to MARPOL Annex VI, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(iii) of MARPOL, that the amendments shall be deemed to have been accepted on 1 February 2025 unless prior to that date not less than one third of the Parties or Parties the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet have communicated to the Organization their objection to the amendments;

3 INVITES the Parties to note that, in accordance with article 16(2)(g)(ii) of MARPOL, the said amendments shall enter into force on 1 August 2025 upon their acceptance in accordance with paragraph 2 above;

4 ALSO INVITES the Parties to consider the early application of the amendments to appendix IX with regard to information to be submitted to the IMO Ship Fuel Oil Consumption Database from 1 January 2025;

5 REQUESTS the Secretary-General, for the purposes of article 16(2)(e) of MARPOL, to transmit certified copies of the present resolution and the text of the amendments contained in the annex to all Parties to MARPOL;

6 ALSO REQUESTS the Secretary-General to transmit copies of the present resolution and its annex to Members of the Organization which are not Parties to MARPOL.

ANNEX

AMENDMENTS TO MARPOL ANNEX VI

(Low-flashpoint fuels and other fuel oil related issues, marine diesel engine replacing steam system, accessibility of data and inclusion of data on transport work and enhanced granularity in the IMO Ship Fuel Consumption Database (IMO DCS))

Regulation 2
Definitions

1 Paragraph 1.14 is replaced by the following:

"1.14 *Fuel oil* means any fuel delivered to and intended for use on board a ship."

2 A new paragraph 1.33 is inserted after existing paragraph 1.32, as follows:

"1.33 *Gas fuel* means a fuel oil with a vapour pressure exceeding 0.28 MPa absolute at a temperature of 37.8°C.*"

* Refer to paragraph 2.2.18 of the *International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code)*

Regulation 13
Nitrogen oxides (NO_X)

Major conversion

3 Paragraph 2.2 is replaced by the following:

"2.2 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 this regulation at the time of the replacement or addition of the engine shall apply. For the purpose of this regulation, the installation of a marine diesel engine replacing a steam system shall be considered a replacement engine. In the case of replacement engines only, if it is not possible for such a replacement engine to meet the standards set forth in paragraph 5.1.1 of this regulation (Tier III, as applicable), then that replacement engine shall meet the standards set forth in paragraph 4 of this regulation (Tier II), taking into account the guidelines developed by the Organization*. The Administration shall notify the Organization in those instances where a Tier II rather than a Tier III replacement engine has been installed on or after 1 August 2025 in accordance with the provisions of this paragraph.

* Refer to the *2024 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* (resolution MEPC.386(81)).

Regulation 14
Sulphur oxides (SO_X) and particulate matter

4 Paragraph 12 is replaced by the following:

"12 The requirements of paragraphs 10 and 11 above are not applicable to a fuel oil service system used for a low-flashpoint fuel or a gas fuel."

Regulation 18
Fuel oil availability and quality

5 The existing chapeau of paragraph 3 is replaced by the following:

"3 Fuel oil delivered to and used on board a ship to which this Annex applies shall meet the following requirements:"

6 The existing chapeau of paragraph 3.2 is replaced by the following:

"3.2 fuel oil derived by methods other than petroleum refining shall not:"

7 Paragraph 4 is replaced by the following:

"4 This regulation does not apply to coal in its solid form or nuclear fuels. Paragraphs 5.1, 8.1 and 8.2 of this regulation do not apply to a low-flashpoint fuel or a gas fuel."

8 Paragraph 5 is replaced by the following new paragraphs 5.1 and 5.2, as follows:

"5.1 For each ship subject to regulations 5 and 6 of this Annex, details of fuel oil delivered to and used on board that ship shall be recorded by means of a bunker delivery note that shall contain at least the information specified in appendix V to this Annex.

5.2 For each ship subject to regulations 5 and 6 of this Annex, details of low-flashpoint fuel or gas fuel delivered to and used on board that ship shall be recorded by means of a bunker delivery note that shall include at least the information specified in items 1 to 6 of appendix V to this Annex, the density as determined by a test method appropriate to the fuel type together with the associated temperature and a declaration signed and certified by the fuel oil supplier's representative that the fuel oil is in conformity with paragraph 3 of this regulation. In addition the sulphur content of a low-flashpoint fuel or a gas fuel delivered to a ship specifically for use on board that ship shall be documented on the bunker delivery note by the supplier in terms of either the actual value as determined by a test method appropriate to the fuel type or, with the agreement of the appropriate authority at the port of supply, a statement that the sulphur content, when tested by such a method, is less than 0.001% m/m."

9 Paragraph 9.2 is replaced by the following:

".2 require local suppliers to provide the bunker delivery note and, if applicable, the MARPOL delivered sample as required by this regulation, certified by the fuel oil supplier that the fuel oil meets the requirements of regulations 14 and 18 of this Annex; "

Regulation 27
Collection and reporting of ship fuel oil consumption data

10 New paragraphs 14 and 15 are added after existing paragraph 13, as follows:

"14 On an ad hoc basis, the Secretary-General of the Organization may share data with analytical consultancies and research entities, under strict confidentiality rules.

15 The Secretary-General of the Organization, on the request of a company, shall grant access to the fuel oil consumption reports of the company's owned ship(s) in a non-anonymized form to the general public."

Appendix I
Form of International Air Pollution Prevention (IAPP) Certificate (regulation 8)

11 Paragraph 2.3.5 is replaced by the following:

"In accordance with regulation 14.12, the requirement for fitting or designating sampling point(s) in accordance with regulation 14.10 or 14.11 is not applicable for a fuel oil service system used for a low-flashpoint fuel or a gas fuel……□"

Appendix IX
Information to be submitted to the IMO Ship Fuel Oil Consumption Database (regulation 27)

12 Appendix IX is replaced by the following:

"

Appendix IX

Information to be submitted to the IMO Ship Fuel Oil Consumption Database (regulation 27)

Identity of the ship

IMO Number…….

Period of calendar year for which the data is submitted

Start date (dd/mm/yyyy) …….

End date (dd/mm/yyyy)……

Technical characteristics of the ship

Year of delivery…….....

Ship type, as defined in regulation 2.2 of this Annex or other (to be stated) …….

Gross tonnage[1] (GT)……

Net tonnage (NT)[2] ……

Deadweight tonnage (DWT)[3] ……

Power output (rated power)[4] of main and auxiliary reciprocating internal combustion engines over 130 kW (to be stated in kW) ……...

Attained EEDI[5] (if applicable)..…… ……

Attained EEXI[6] (if applicable) ……

Ice class[7] ……...

Fuel oil consumption data

Total fuel oil consumption by fuel oil type[5] in metric tonnes and methods used for collecting fuel oil consumption data:…… …….

Total fuel oil consumption by fuel oil type[5] per consumer type in metric tonnes and methods used for collecting fuel oil consumption data:

Main Engine(s) …….

Auxiliary Engine(s)/Generator(s) ……

Oil-fired Boiler(s) ……..

Others (specify) ……

Fuel oil consumption while the ship is not under way by fuel oil type[5] per consumer type in metric tonnes and methods used for collecting fuel oil consumption data:

Main Engine(s) …….

Auxiliary Engine(s)/Generator(s) ……

Oil-fired Boiler(s) ……..

Others (specify) ……

Total distance travelled (nm)……

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1 Gross tonnage should be calculated in accordance with the International Convention on Tonnage Measurement of Ships, 1969.

2 Net tonnage should be calculated in accordance with the International Convention on Tonnage Measurement of Ships, 1969. If not applicable, note "N/A".

3 DWT means the difference in tonnes between the displacement of a ship in water of relative density of 1,025 kg/m^3 at the summer load draught and the lightweight of the ship. The summer load draught should be taken as the maximum summer draught as certified in the stability booklet approved by the Administration or an organization authorized by it. If not applicable, note "N/A".

4 Rated power means the maximum continuous rated power as specified on the nameplate of the engine.

5 Refer to the *2022 Guidelines on the method of calculation of the attained Energy Efficiency Design Index (EEDI) for new ships* (resolution MEPC.364(79)).

6 Refer to the *2022 Guidelines on the method of calculation of the attained Energy Efficiency Existing Ship Index (EEXI)* (resolution MEPC.350(78)).

7 Ice class should be consistent with the definition set out in the International Code for Ships Operating in Polar Waters (Polar Code) (resolutions MEPC.264(68) and MSC.385(94)). If not applicable, note "N/A".

Laden distance travelled (nm) (on a voluntary basis) ……

Hours under way ……..

Total amount of onshore power supplied (kWh) ……..….

For ships to which regulation 28 of MARPOL Annex VI applies

Total transport work …….

Applicable CII[8]: ☐ AER ☐ cgDIST

Required annual operational CII[9]……...

Attained annual operational CII before any correction[10]……

Attained annual operational CII[11]……...

Installation of innovative technology[12], if applicable: ☐ A ☐ B-1 ☐ B-2 ☐ C-1 ☐ C-2

Operational carbon intensity rating[13]: ☐ A ☐ B ☐ C ☐ D ☐ E

CII for trial purpose (on voluntary basis)[14]:

☐ EEPI (gCO_2/t/nm) ……

☐ cbDIST (gCO_2/berth/nm) ……

☐ clDIST (gCO_2/m/nm) ……..

☐ EEOI (gCO_2/t/nm)[15] ……..."

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8 Refer to the *2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)* (resolution MEPC.352(78)).

9 Refer to the *2022 Guidelines on the reference lines for use with operational carbon intensity indicators (CII reference lines guidelines, G2)* (resolution MEPC.353(78)) and *2021 Guidelines on the operational carbon intensity reduction factors relative to reference lines (CII reduction factors guidelines, G3)* (resolution MEPC.338(76)).

10 As calculated in accordance with the *2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)* (resolution MEPC.352(78)) before any correction using *Interim guidelines on correction factors and voyage adjustments for CII calculations (G5)* (resolution MEPC.355(78)).

11 As calculated in accordance with the *2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)* (resolution MEPC.352(78)) and having been corrected taking into account *Interim guidelines on correction factors and voyage adjustments for CII calculations (G5)* (resolution MEPC.355(78)).

12 Refer to the *2021 Guidance on treatment of innovative energy efficiency technologies for calculation and verification of the attained EEDI and EEXI* (MEPC.1/Circ.896).

13 Refer to the *2022 Guidelines on the operational carbon intensity rating of ships (CII rating guidelines, G4)* (resolution MEPC.354(78)).

14 Refer to the *2022 Guidelines on operational carbon intensity indicators and the calculation methods (CII guidelines, G1)* (resolution MEPC.352(78)).

15 Refer to the *Guidelines for voluntary use of the ship energy efficiency operational indicator (EEOI)* (MEPC.1/Circ.684).