

附件 2

第 MEPC.398(83)号决议
(2025 年 4 月 11 日通过)

《2008 年氮氧化物技术规则》修正案

(验证经过实质性改装的发动机或验证为发动机在安装时未予验证的层级)

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,

进一步忆及《防污公约》附则VI第13条, 根据该条, 《船用柴油发动机氮氧化物排放控制技术规则》(以下称“《2008年氮氧化物技术规则》”)在该附则下为强制性规则,

在其第八十三届会议上, 审议了按照《防污公约》第16(2)(a)条散发的关于验证经过实质性改装的发动机或验证为发动机在安装时未予验证的层级的《2008年氮氧化物技术规则》修正案草案,

- 1 按《防污公约》第16(2)(d)条, 通过《2008年氮氧化物技术规则》修正案, 其文本载于本决议附件;
- 2 按《防污公约》第16(2)(f)(ii)和16(2)(f)(iii)条, 决定该修正案应于2026年3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2026年9月1日生效;
- 4 还提请各缔约国考虑提早适用关于验证经过实质性改装的发动机或验证为发动机在安装时未予验证的层级的《2008年氮氧化物技术规则》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

《2008 年氮氧化物技术规则》修正案

(验证经过实质性改装的发动机或验证为发动机在安装时未予验证的层级)

第 7 章 – 现有发动机的发证

1 第 7 章拆分为 2 节，每一节的标题如下：

“7.1 根据第 13.7 条的现有发动机的发证”

和

“7.2 验证经过实质性改装的现有发动机或验证为在安装时未予验证的层级”

2 现有第 7.1 至 7.6 段重新编号为第 7.1.1 至 7.1.6 段。

3 新增第 7.2.1 至 7.2.12 段如下：

“7.2.1 除 2.1.1.4、2.1.2.2 和 4.4.4 外，对于已安装的船用柴油发动机，在以下情况下须遵循本节规定的程序：

.1 已进行实质性改装；或

.2 拟验证为在安装时未予验证的层级。

7.2.2 除本节另有明确规定外，本规则的要求均适用。

7.2.3 本节所规定的程序可适用于单台发动机，或适用于以母型机为代表的发动机组，但不得用于发动机族认证。

7.2.4 如果因实质性改装，发动机的额定功率和/或额定转速与原工况相比出现变化，须相应更换发动机铭牌。

7.2.5 在设置应遵循的试验循环的负载点时，6.4.6.7 的规定须适用。如果负载点为 100%，根据发动机排放测试计划，须允许该负载点不低于额定功率的 85%。如果达不到该值，须推迟进行测试，直到至少能达到该功率水平。无论在该负载点实际产生的功率，须采用 3.2 规定的试验循环 100% 功率加权因数。

7.2.6 在试验循环的每个负载点，须适用 6.4.6.8 的规定，而非 5.9.6.2 的规定。

7.2.7 对于 E3 试验循环，如果实际螺旋桨曲线与 E3 曲线不同，须使用经测量的发动机功率来设置所用的负载点。

- 7.2.8 发动机性能和环境条件监控设备须符合 6.4.5.1 的要求。
- 7.2.9 关于湿度和温度的氮氧化物修正, 6.4.13 的规定须适用。
- 7.2.10 申请方制定的发动机排放测试计划须在安排该测试之前得到主管机关的批准。
- 7.2.11 按照本节规定确定的发动机组中成员机的认证, 须遵循 2.2.2 规定的程序。
- 7.2.12 关于验证经过实质性改装的船用柴油发动机或验证为在安装发动机时未予验证的层级方面的指南, 见本规则附录 II 的图 4。如有分歧, 则以《2008 年氮氧化物技术规则》的文本为准。”

附录 II

船用柴油发动机检验和发证流程图

(参阅《2008 年氮氧化物技术规则》2.2.9 和 2.3.11)

- 4 现有的附录 II 标题由以下替换:

“船用柴油发动机检验和发证流程图(参阅《2008 年氮氧化物技术规则》2.2.9、2.3.11 和 7.2.12)”

- 5 在段首中, 插入对第 7 章和图 4 的引用如下:

“本附录图 1、2、3 和 4 给出了本规则第 2 和 7 章中所述的船用柴油发动机检验和发证的符合指南。”

- 6 在段首中, “图 3: 船上换证、年度或中间检验”后新增“图 4: 验证经过实质性改装的现有发动机或验证为在安装时未予验证的层级”。

7 图 3 后新增图 4 如下:

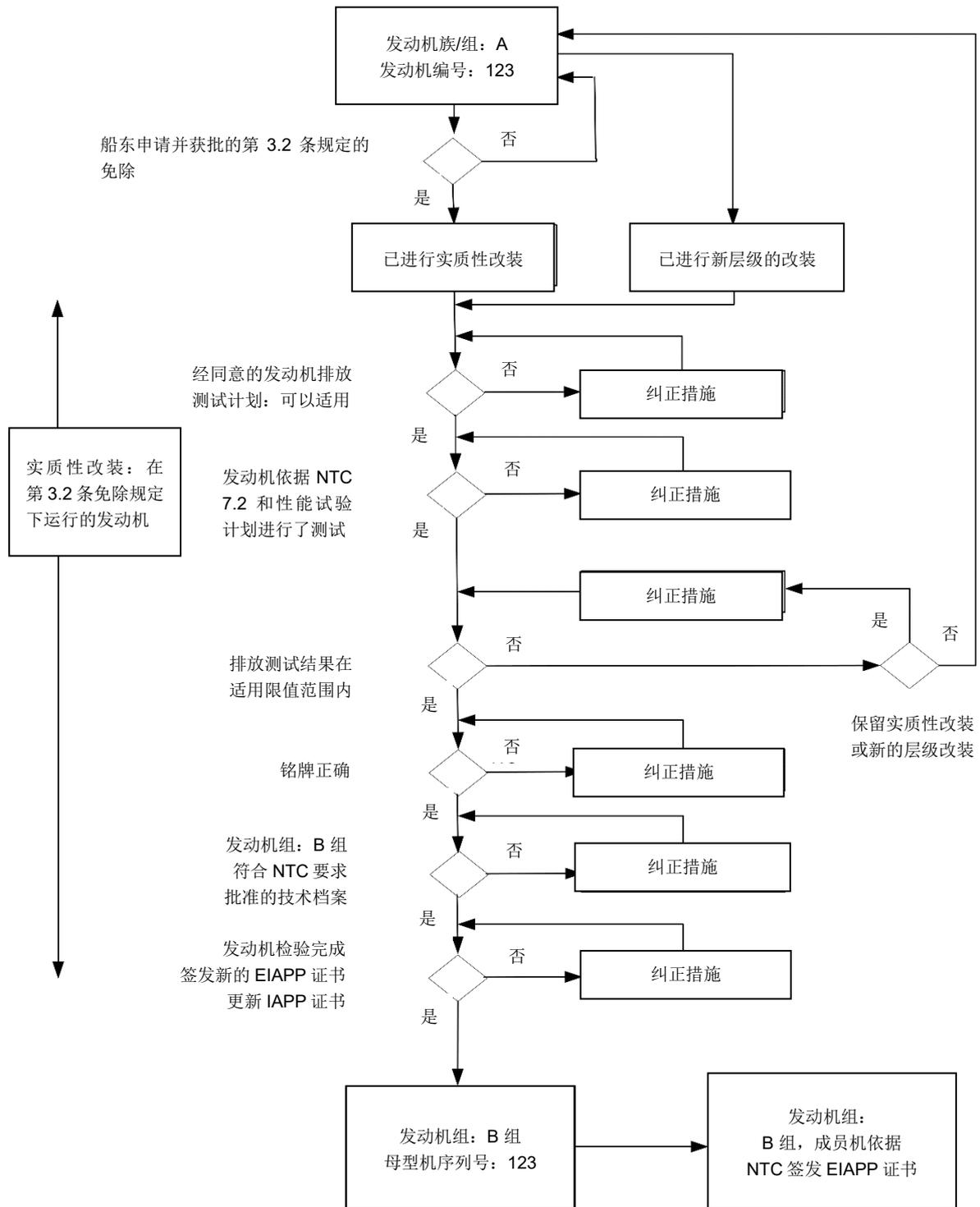


图 4: 根据本规则 7.2 的要求验证经过实质性改装的现有发动机或验证为在安装时未予验证的层级”

ANNEX 2

RESOLUTION MEPC.398(83) (adopted on 11 April 2025)

AMENDMENTS TO THE NO_x TECHNICAL CODE 2008

(Certification of an engine subject to substantial modification or being certified to a Tier to which the engine was not certified at the time of its installation)

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,

RECALLING FURTHER regulation 13 of MARPOL Annex VI, which makes the Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines (hereafter "NO_x Technical Code 2008") mandatory under that Annex,

HAVING CONSIDERED, at its eighty-third session, draft amendments to the NO_x Technical Code 2008 concerning the certification of an engine subject to substantial modification or being certified to a Tier to which the engine was not certified at the time of its installation, as appropriate, approved at its eighty-second session and duly circulated in accordance with article 16(2)(a) of MARPOL,

1 ADOPTS, in accordance with article 16(2)(d) of MARPOL, amendments to the NO_x Technical Code 2008, the text of which is set out in the annex to the present resolution;

2 DETERMINES, in accordance with article 16(2)(f)(ii) and (iii) of MARPOL, that the amendments shall be deemed to have been accepted on 1 March 2026 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 September 2026 upon their acceptance in accordance with paragraph 2 above;

4 ALSO INVITES the Parties to consider the early application of the amendments to the NO_x Technical Code 2008 concerning the certification of an engine subject to substantial modification or being certified to a Tier to which the engine was not certified at the time of its installation;

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 THE NO_x TECHNICAL CODE 2008

(Certification of an engine subject to substantial modification or being certified to a Tier to which the engine was not certified at the time of its installation)

Chapter 7 – Certification of an existing engine

1 Chapter 7 is split into two sections with the following titles:

"7.1 Certification of an existing engine under regulation 13.7"

and

"7.2 Certification of an engine subject to substantial modification or being certified to a Tier to which the engine was not certified at the time of its installation"

2 Existing paragraphs 7.1 to 7.6 are renumbered as sub-paragraphs 7.1.1 to 7.1.6.

3 New sub-paragraphs 7.2.1 to 7.2.12 are added as follows:

"7.2.1 Further to 2.1.1.4, 2.1.2.2 and 4.4.4, the procedures as given in this section shall be followed where an installed marine diesel engine:

.1 has been subject to substantial modification; or

.2 is to be certified to a Tier to which it was not certified at the time of its installation.

7.2.2 The requirements of this Code apply other than as specifically provided for by this section.

7.2.3 The procedures given by this section may be accepted for an Individual Engine or for an Engine Group represented by the Parent Engine. It shall not be accepted for Engine Family certification.

7.2.4 Where, as a result of the substantial modification, the rated power and/or the rated speed of the engine is altered from the original condition the engine nameplate shall be replaced accordingly.

7.2.5 In setting the load points of the test cycle to be followed the provisions of 6.4.6.7 shall apply. In the case of the 100% load point this shall, subject to the Engine Emission test plan, be allowed to be no lower than 85% of rated power. If that value cannot be achieved, then the test shall be deferred to such time that at least that power level can be achieved. The test cycle 100% power weighting factor under 3.2 shall be applied irrespective of actual power developed at that load point.

7.2.6 At each load point of a test cycle, the provisions of 6.4.6.8 shall apply rather than those of 5.9.6.2.

7.2.7 In the case of the E3 test cycle, if the actual propeller curve differs from the E3 curve, the load point used shall be set using the measured engine power.

7.2.8 Engine performance and ambient condition monitoring equipment requirements shall be in accordance with the requirements of 6.4.5.1.

7.2.9 In terms of the NO_x correction for humidity and temperature, the provisions of 6.4.13 shall apply.

7.2.10 The Engine Emission test plan as prepared by the applicant shall be agreed with the Administration before scheduling that test.

7.2.11 The certification of a Member Engine of the Engine Group as established following the provisions of this section shall follow the procedures specified in 2.2.2.

7.2.12 Guidance in respect of the certification of a marine diesel engine subject to substantial modification or being certified to a Tier to which the engine was not certified at the time of its installation is given by figure 4 of appendix II of this Code. Where discrepancies exist, the text of the NO_x Technical Code 2008 takes precedence."

Appendix II

Flow charts for survey and certification of marine diesel engines (refer to 2.2.9 and 2.3.11 of the NO_x Technical Code 2008)

4 The existing title of appendix II is replaced with the following:

"Flow charts for survey and certification of marine diesel engines (refer to 2.2.9, 2.3.11 and 7.2.12 of the NO_x Technical Code 2008)"

5 In the chapeau, reference to chapter 7 and figure 4 are inserted, to read:

"Guidance for compliance with survey and certification of marine diesel engines, as described in chapters 2 and 7 of this Code, is given in figures 1, 2, 3 and 4 of this appendix."

6 In the chapeau, a new line "Figure 4: Certification of an engine subject to substantial modification or being certified to a Tier to which the engine was not certified at the time of its installation" is added after the line of "Figure 3: Renewal, annual or intermediate survey on board a ship".

7 A new figure 4 is added after figure 3 as follows:

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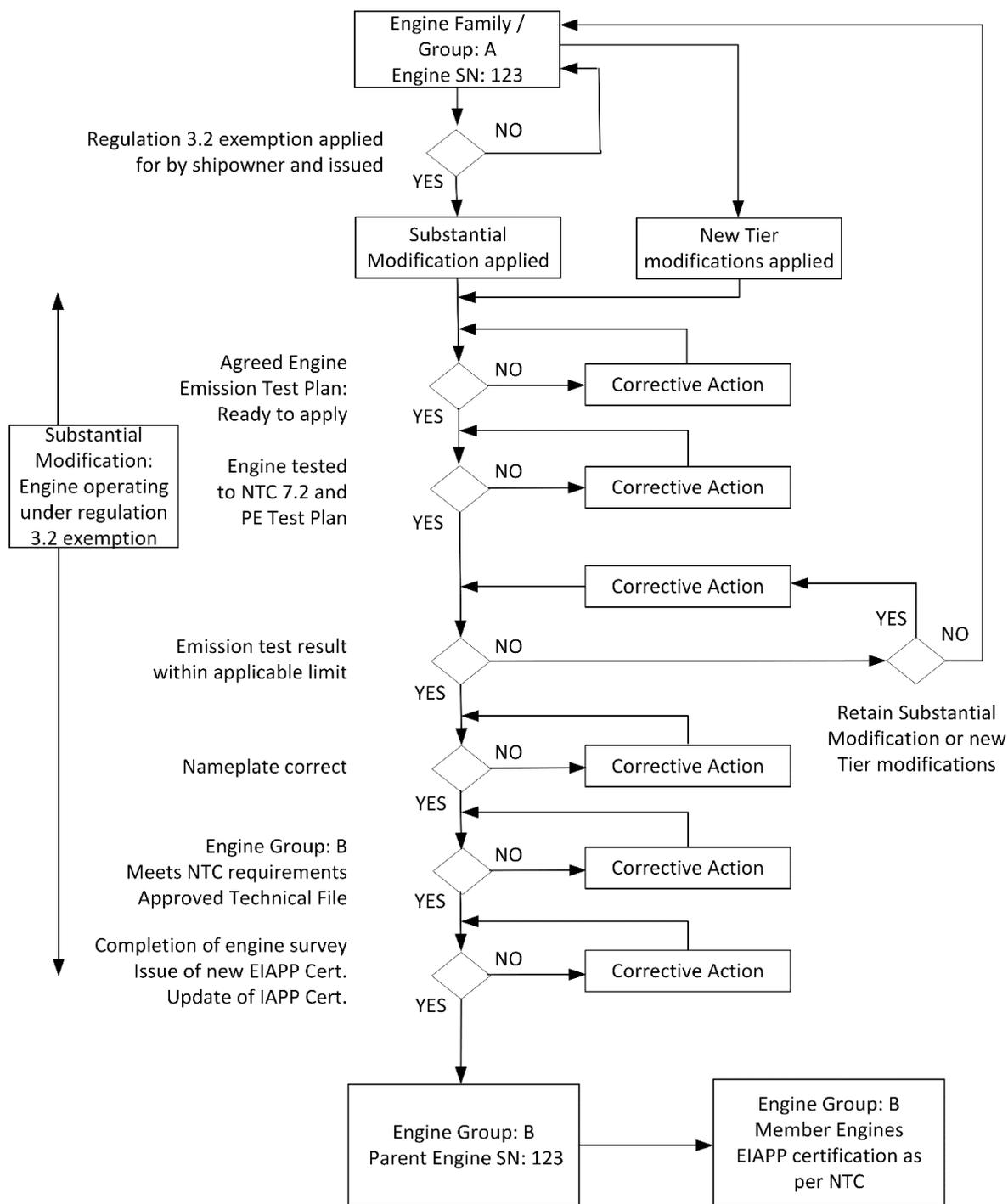


Figure 4: Certification of an engine subject to substantial modification or being certified to a tier to which the engine was not certified at the time of its installation in accordance with 7.2 of this Code

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