

## ANNEX 2

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

#### AMENDMENTS TO THE NO<sub>x</sub> 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<sub>x</sub> Technical Code 2008") mandatory under that Annex,

HAVING CONSIDERED, at its eighty-third session, draft amendments to the NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> Technical Code 2008)"

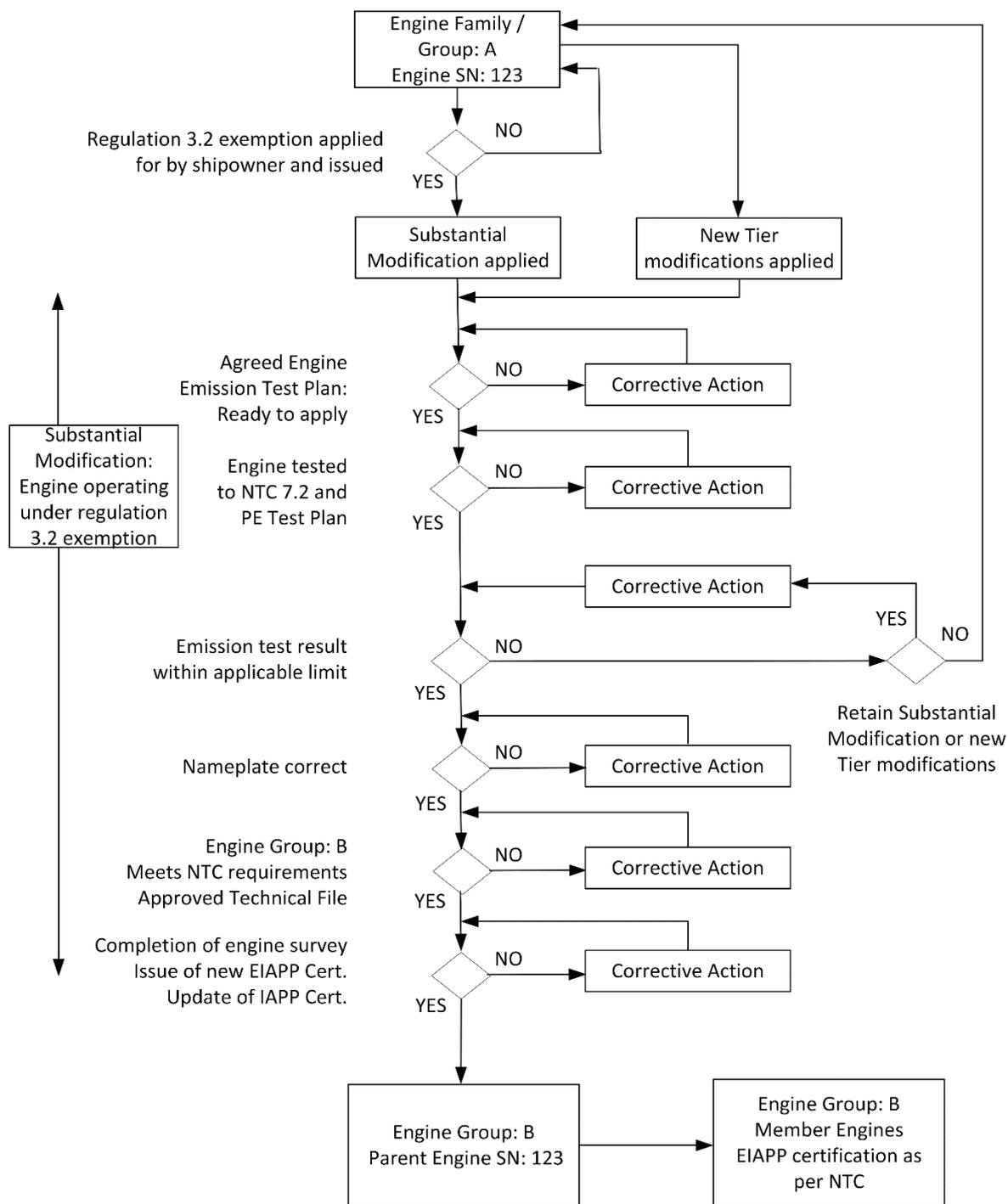
5 In the chapeau, reference to chapter 7 and figure 4 are inserted, to read:

"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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