

RESOLUTION MEPC.243(66)

Adopted on 4 April 2014

2014 GUIDELINES ON THE APPROVED METHOD PROCESS

## ANNEX 2

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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 (the Committee) conferred upon it by international conventions for the prevention and control of marine pollution from ships,

RECALLING ALSO that, at its fifty-eighth session, the Committee adopted, by resolution MEPC.176(58), a revised MARPOL Annex VI (hereinafter referred to as "MARPOL Annex VI") which significantly strengthens the emission limits for nitrogen oxides (NO<sub>x</sub>) in light of technological improvements and implementation experience,

NOTING that regulation 13.7.1 of MARPOL Annex VI requires an Approved Method to be certified by an Administration of a Party,

RECOGNIZING the need to develop guidelines to set forth the process of approving an Approved Method,

NOTING ALSO the 2014 Guidelines in respect of the information to be submitted by an Administration to the Organization covering the certification of an approved method as required under regulation 13.7.1 of MARPOL Annex VI, adopted by resolution MEPC.242(66),

HAVING CONSIDERED, at its sixty-sixth session, the draft *2014 Guidelines on the Approved Method process*, proposed by the Sub-Committee on Pollution Prevention and Response, at its first session,

1. ADOPTS the *2014 Guidelines on the Approved Method process*, as set out in the annex to the present resolution;
2. INVITES Administrations to take the annexed Guidelines into account when an application for a new Approved Method is being considered;
3. REQUESTS the Parties to MARPOL Annex VI and other Member Governments to bring the annexed Guidelines to the attention of shipowners, ship operators, shipbuilders, marine diesel engine manufacturers, and any other interested groups; and
4. AGREES to keep these Guidelines under review in the light of experience gained with their application.

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#### 1 PURPOSE

The purpose of these Guidelines is to assist Administrations, port State inspectors, shipowners and others to understand the Approved Method process and responsibilities. For clarity the Approved Method process is illustrated in figure 1. Further details are given in the following paragraphs.

#### 2 IDENTIFICATION AS TO THE APPLICABILITY OF AN APPROVED METHOD

2.1 After notification of the certification of an Approved Method by an IMO circular, shipowners potentially affected by the Approved Method should investigate as to whether that Approved Method is applicable to engines under their control by checking against the criteria for identification of applicable engines included in the circular.

2.2 In those instances where items specified in paragraphs .1 to .3 of the appendix as listed in the notification do not apply, the Approved Method does not apply and no further action is required.

2.3 In those instances where an engine corresponds in full with the items specified in paragraphs .1 to .6 of the appendix as listed in the notification, as confirmed by the ship's Administration, the shipowner should arrange through the contact point given in the IMO circular for the installation of the Approved Method within the given time period as specified in regulation 13.7.2 of MARPOL Annex VI. In making that arrangement, the shipowner should provide such engine specific information as is necessary for the preparation of that engine's Approved Method File.

2.4 In those instances where it is considered that an Approved Method is not applicable since, although conforming with the items specified in paragraphs .1 to .3 of the appendix as listed in the notification, it does not conform to one or more points specified in paragraphs .4 to .6 of the appendix, due to installation or post manufacture modification, the shipowner should contact the relevant contact point as given in the IMO circular. In that communication, information should be given as to why it is considered that one or more of points specified in paragraphs .4 to .6 of the appendix do not apply. The contact point should assess that application for non-applicability of fitting the Approved Method against their knowledge of the Approved Method. The outcome of that review (agreement or disagreement) should be passed to the certifying Administration and ship's Administration for their review and confirmation of that finding.

- .1 In the case of agreement as to non-applicability, the certifying Administration should duly document the non-applicability giving the Approved Method approval reference, details of the engine to which the non-applicability applies (make, model, serial number or other verifiable and unique identifiers) and details of the reason(s) for which the engine is found non-applicable together with any other relevant information. Any agreement on non-applicability should have the concurrence of the ship's Administration. The non-applicability documentation should be retained on board as evidence of non-applicability of a particular Approved Method. In this it must be noted that although non-applicability documentation has

been issued against a particular Approved Method, a subsequently certified Approved Method may apply.

- .2 In those instances where those Administrations agree with the contact point that the shipowner's reason for claiming non-applicability is not valid, the shipowner will be advised and informed that fitting of the Approved Method is required within the given time period.

### **3 ALTERNATIVE TO THE INSTALLATION OF AN APPROVED METHOD**

For an engine identified in above paragraph 2.3 or 2.4.2 as being applicable to an Approved Method, regulation 13.7.1.2 of MARPOL Annex VI allows that the engine may alternatively be certified to Tier I, II or III.\* In such instances the issue of the EIAPP Certificate, approval of the associated Technical File and the initial and subsequent survey procedures should be in accordance with the given NO<sub>x</sub> Technical Code 2008 procedures for engines installed on ships constructed on or after 1 January 2000. The IAPP Certificate of the ship on which that engine is installed should be duly updated within the time period given by regulation 13.7.2 of MARPOL Annex VI relevant to the Approved Method to which it is an alternative.

**\*Note:** Typically it may be expected that this option may be adopted in those cases where a series of ships spanned the introduction date of the NO<sub>x</sub> certification requirement. In such cases those ships in the series which were constructed on or after 1 January 2000 will have NO<sub>x</sub> certified engines, however, those ships in the series constructed before that date may have identical engines installed, except that they were not NO<sub>x</sub> certified. In these instances it may be possible to back-certify those previously uncertified engines on the basis of being additional member engines of the engine groups/families to which the certified engines belong.

### **4 APPROVED METHOD NOT COMMERCIALY AVAILABLE**

4.1 In case where the Approved Method is not commercially available despite best efforts to obtain it within the time period given by regulation 13.7.2 of MARPOL Annex VI (noting that this does not cover instances when not convenient in relation to the ship's schedule to fit the Approved Method) then application should be made to the ship's Administration, giving details of the efforts made to have installed the Approved Method. The ship's Administration should review that information and, if in agreement that the Approved Method is not at that time commercially available, a statement to that effect should be duly provided to the shipowner. That statement should be retained on board and be available at surveys or inspections as required.

4.2 Thereafter the shipowner should, in accordance with regulation 13.7.2 of MARPOL Annex VI, reassess the commercial availability in a timely manner prior to the next annual survey, and if available, to have the Approved Method installed no later than that annual survey. If the Approved Method is still not available the process in paragraph 4.1 of these guidelines should be repeated. Thereafter, this process should be repeated for each annual survey until the Approved Method is commercially available and hence installed.

### **5 SURVEY CONFIRMING INSTALLATION OF THE APPROVED METHOD**

5.1 Upon completion of the installation of the Approved Method, an initial (onboard confirmation) survey should be undertaken by the ship's Administration in accordance with the onboard verification procedure specified in the Approved Method File.

5.2 A chronological record should be maintained, covering the installation of the Approved Method and all changes, including like-for-like replacements, of components and adjustments/operating values as covered by the Approved Method. This record should accompany the Approved Method File as evidence of the initial installation.

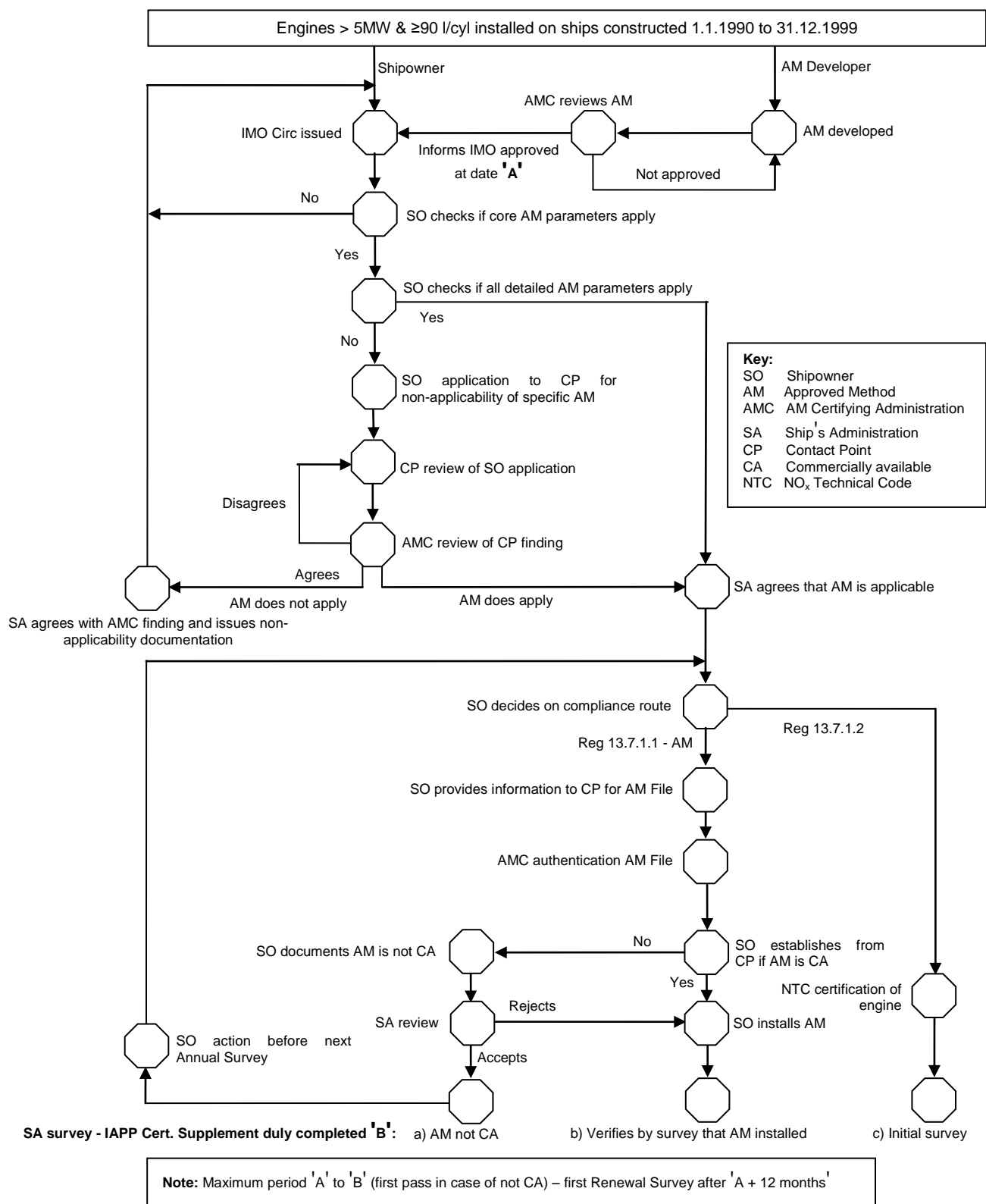
## **6 SURVEYS CONFIRMING RETENTION OF THE APPROVED METHOD**

6.1 The in-service surveys after the installation of the Approved Method should be carried out in accordance with the onboard verification procedure specified in the Approved Method File. The survey is to be conducted as part of a ship's survey in accordance with regulation 5 of MARPOL Annex VI.

6.2 The Approved Method record should be maintained and be available on board at the relevant surveys.

**7 APPROVED METHOD PROCESS FLOWCHART**

Figure 1 illustrates the overall Approved Method process.



**Figure 1 – Approved Method process flowchart**

**APPENDIX****EXTRACT FROM THE 2014 GUIDELINES IN RESPECT OF THE INFORMATION TO BE SUBMITTED BY AN ADMINISTRATION TO THE ORGANIZATION COVERING THE CERTIFICATION OF AN APPROVED METHOD AS REQUIRED UNDER REGULATION 13.7.1 OF MARPOL ANNEX VI****Criteria for the identification of an engine to which an Approved Method applies**

The criteria, relating to original engine condition, which define the applicability of a particular Approved Method should include the following items:

- .1 manufacturer/licensee, engine type and model;
- .2 application cycle(s) e.g. E2, E3, D2 or C1, as specified in chapter 3 of the NO<sub>x</sub> Technical Code 2008 as appropriate;
- .3 rated power (kW) and rated speed (rpm) as given on the nameplate or as modified by approved re-rating:
  - .1 the applicable power output/rated speed range is to be clearly shown whether these represent a "line" or a "box", the exception or inclusion on the boundary and any exceptions either inside or outside that boundary; and
  - .2 in addition, any potentially necessary calculation processes (for example between horsepower (metric/imperial) and kW) including the rounding method is to be clearly specified;
- .4 NO<sub>x</sub> critical components and how their identity should be established. Where there is a combination of components, it should be described how those are interrelated;
- .5 NO<sub>x</sub> critical settings or operating values and how those values should be established. Where there are combinations of settings, it should be described how these are interrelated. In addition, any potentially necessary calculation processes (for example to bring P<sub>max</sub> or P<sub>comp</sub> to the ISO specified condition), including the rounding method, is to be clearly specified; and
- .6 any other specific points which relate to engines to which the Approved Method applies.

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