INTERNATIONAL MARITIME ORGANIZATION

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SUB-COMMITTEE ON POLLUTION PREVENTION AND RESPONSE
5th session
Agenda item 10

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REVISED CERTIFICATION REQUIREMENTS FOR SCR SYSTEMS UNDER THE NO_X TECHNICAL CODE

Draft amendments to the NO_X Technical Code 2008 and consequential draft amendments to resolution MEPC.291(71) to make Scheme A and Scheme B equally applicable

Submitted by IACS

SUMMARY

Executive summary:	This document proposes draft amendments to the NO_X Technical Code 2008 and consequential amendments to resolution MEPC.291|(71) to make Scheme A and Scheme B equally applicable, as agreed by the Sub-Committee at its fourth session
Strategic direction:	Number to be assigned after A 30
High-level action:	Number to be assigned after A 30
Output:	Number to be assigned after A 30
Action to be taken:	Paragraph 10
Related documents:	PPR 4/17, PPR 4/17/1, PPR 4/17/2, PPR 4/21 (paragraph 17.9) and MEPC 71/17 (paragraph 14.31)

Background

1 Following consideration of documents PPR 4/17 (Sweden), PPR 4/17/1 (Norway) and PPR 4/17/2 (Finland), PPR 4 endorsed the view of the Working Group on Prevention of air pollution from ships, which was established at that session; that Scheme A and Scheme B should be made equally applicable and that amendments to the NO_X Technical Code 2008 were required to effect this (PPR 4/21, paragraph 17.9.3).

2 Subsequently, MEPC 71, having considered the relevant suggestion by PPR 4 to amend the title of the output, taking into consideration that Scheme A and Scheme B should be made equally applicable and that amendments to the NO_X Technical Code 2008 were required, agreed to amend the title of this output (MEPC 71/17, paragraph 14.31).

Introduction

3 Currently, paragraph 2.2.5.1 of the NO_X Technical Code states (with emphasis shown as underlined):

"2.2.5 NO_X reducing devices

.1 Where a NO_X-reducing device is to be included within the EIAPP certification, it must be recognized as a component of the engine, and its presence shall be recorded in the engine's Technical File. The engine shall be tested with the NO_X-reducing device fitted unless, due to technical and practical reasons, the combined testing is not appropriate and the procedures specified in paragraph 2.2.4.1 cannot be applied, subject to approval by the Administration. In the latter case, the applicable test procedure shall be performed and the combined engine/NO_X-reducing device shall be approved and pre-certified by the Administration taking into account guidelines developed by the Organization*. However, this pre-certification is subject to the limitations given in paragraph 2.2.4.2.

* Refer to the *2011 Guidelines addressing additional aspects to the NO_X Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with selective catalytic reduction (SCR) systems* adopted by resolution MEPC.198(62)."

4 Resolution MEPC.291(71), which supersedes the 2011 Guidelines that were adopted by resolution MEPC.198(62) and amended by resolution MEPC.260(68), provides guidance to Administrations on how to test engines if combined testing is not appropriate (the so-called 'Scheme B' approach).

Discussion

5 Since the entry into force of the Tier III requirements in NO_X emission control areas in 2016, IACS members, in their role as recognized organizations, have been approached with requests to consider applications following the Scheme B approach, as explained in resolution MEPC.291(71). In recent years, several emission tests conducted in accordance with Scheme B have been successfully performed and corresponding engine groups have been approved.

6 Based on the experience gathered, IACS is of the view that Scheme A and Scheme B can be considered as equivalent.

Proposed amendments to paragraph 2.2.5.1 of the NO_X Technical Code 2008

7 Taking into account the comments and analysis provided above, the following draft amendments are proposed to paragraph 2.2.5.1 of the NO_X Technical Code 2008, as amended by resolution MEPC.217(63) (shown as additions/~~deletions~~):

"2.2.5 NO_x reducing devices

.1 Where a NO_X-reducing device is to be included within the EIAPP certification, it must be recognized as a component of the engine, and its presence shall be recorded in the engine's Technical File. The engine shall be tested with the NO_X-reducing device fitted. ~~unless, due to technical and practical reasons, the combined testing is not appropriate and the procedures specified in paragraph 2.2.4.1 cannot be applied, subject to approval by the~~

~~Administration. In the latter case,~~ As an alternative to the combined testing, the applicable test procedure shall be performed and the combined engine/NO_X-reducing device shall be approved and pre-certified by the Administration taking into account guidelines developed by the Organization*. However, this pre-certification is subject to the limitations given in paragraph 2.2.4.2.

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* ~~Refer to the *2011 Guidelines addressing additional aspects to the NOx Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with selective catalytic reduction (SCR) systems* adopted by resolution MEPC.198(62).~~ Refer to the *2017 Guidelines addressing additional aspects to the NO_x Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with selective catalytic reduction (SCR) systems* adopted by resolution MEPC.291(71)."

Consequential amendments to resolution MEPC.291(71)

8 Should the draft amendments proposed in paragraph 7 above be agreed by the Sub-Committee, IACS proposes that paragraphs 1.3 and 3.1.1 of resolution MEPC.291(71) should also be updated accordingly.

9 Consequently, the following draft amendments to paragraphs 1.3 and 3.1.1 of the annex to resolution MEPC.291(71) are proposed (shown as additions/~~deletions~~):

"1.3 According to paragraph 2.2.5.1 of the NTC 2008, where a NO_X-reducing device is to be included within the EIAPP certification, it must be recognized as a component of the engine, and its presence shall be recorded in the engine's Technical File. The engine shall be tested with the NO_X-reducing device fitted. ~~unless, due to technical and practical reasons, the combined testing is not appropriate and the procedures specified in paragraph 2.2.4.1 of the NTC 2008 cannot be applied, subject to approval by the Administration. In the latter case the provisions of Scheme B as set out in these Guidelines should be applied.~~ As an alternative method, the applicable test procedure could be performed and the combined engine/NO_X-reducing device could be approved and pre-certified by the Administration taking into account provisions of Scheme B as set out in these Guidelines."

"3.1.1 Engine systems fitted with SCR should be certified in accordance with chapter 2 of the NTC 2008. ~~In cases where combined engine/SCR systems cannot be tested on a test bed owing to technical and practical reasons nor an on board test can be performed fully complying with the requirements of chapter 5 of the NTC 2008 the~~ The procedures provided by Scheme A or Scheme B of these guidelines should be applied."

Action requested of the Sub-Committee

10 The Sub-Committee is invited to consider the proposed amendments to the NO_X Technical Code 2008, as proposed in paragraph 7 above, and the consequential draft amendments to resolution MEPC.291(71) as proposed in paragraph 9 above; and to take action as appropriate.
