
RULES FOR MARINE POLLUTION PREVENTION SYSTEMS

RULES

2008 AMENDMENT NO.1

Rule No.14 27th February 2008

Resolved by Technical Committee on 30th November 2007

Approved by Board of Directors on 25th December 2007

“Rules for marine pollution prevention systems” has been partly amended as follows:

Part 8 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

Chapter 2 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

2.1 Nitrogen Oxides (NOx) (Regulation 13 of Annex VI)

2.1.2 Requirements for Installation

Sub-paragraph -1(1) has been amended as follows.

1 On each diesel engine, the exhaust gas cleaning system to reduce NOx emissions specified in the approved technical file is to be installed, otherwise the equivalent method to reduce NOx emissions deemed appropriate by the Society is to be carried out in order to keep the NOx emission measured and calculated in accordance with the followings within the limits specified in **Table 8-1** at the number of maximum continuous revolutions (referred to in **2.1.24, Part A of the Rules for the Survey and Construction of Steel ships**, hereinafter the same) of the engine. However, in case it is ensured that the NOx emission from the engine is within the limits specified in **Table 8-1**, the system and the method are not required.

- (1) NOx emissions are to be measured and calculated applying a test cycle in accordance with the following (a) through (d). The emission values are not to be calculated by the data obtained from another test.
 - (a) For constant speed diesel engines, including those used as main propulsion machinery for electric propulsion ships, and for engines to drive controllable pitch propellers, test cycle E2 specified in **Table 8-2** is to be applied.
 - (b) For diesel engines to drive fixed pitch propellers, test cycle E3 specified in **Table 8-3** is to be applied.
 - (c) For constant speed auxiliary engines, test cycle D2 specified in **Table 8-4** is to be applied.
 - (d) For variable speed, variable load auxiliary engines, not included in (a) through (c), test cycle C1 specified in **Table 8-5** is to be applied.

2.1.3 Technical File and Record Book of Engine Parameters

Sub-paragraph -1(5) has been amended as follows.

1 Technical file

Every diesel engine is to be accompanied with an approved technical file prepared by the diesel engine manufacturer, etc. and containing the following information:

- (1) Identification of those components, including detailed information to enable to find out whether they are modified or not, settings and operating values of the diesel engine which influence its NOx emissions.
- (2) Identification of the full range of allowable adjustments or alternatives for the components of the diesel engine.
- (3) Full record of the relevant engine's performance, including the number of maximum continuous revolutions and maximum continuous output of the engine consistent with those specified on the nameplate.
- (4) At least one of the methods to verify NOx emissions, which is listed in **2.1.2-1(2)** and applicable at the inspection specified in **3.2.2-4(2), Part 2**, or the on-board engine parameter check method otherwise specified by the Society. When on-board direct measurement and monitoring method is applied, procedures for calibration and operation of the measuring equipment specified by the diesel engine manufacturer, etc. are to be contained. In addition, when exhaust gas cleaning system to reduce NOx emissions is installed, on-board NOx verification procedures for the system to ensure it is operating correctly are also to be contained.
- (5) A copy of the test report on the test required in **2.1.3-5(3)(a), Part 2**. (In case the on-board test stipulated in **2.1.3-5(3)(d)i), Part 2** was conducted after the shop test stipulated in **2.1.3-5(3)(a)i), Part 2**, both the test reports are to be included.) For a member engine of an engine family or engine group, it may be substituted for that for the parent engine.
- (6) If applicable, the designation and restrictions for an engine which is a member of an engine family or engine group in consistent with the requirement specified in Chapter 4 of *NOx Technical Code*.
- (7) Specifications of those spare parts/components of the diesel engine which, when used in the engine, according to those specifications, will result in continued compliance of the NOx emission with the limits specified in **2.1.2-1**.
- (8) *EIAPP Certificate*, where it has been issued.
- (9) In case the exhaust gas cleaning system to reduce NOx emissions is installed, record of the presence of the system as an essential component of the diesel engine.
- (10) Where an additional substance is introduced, such as ammonia, urea, steam, water, fuel additives, etc., sufficient information to allow a ready means of demonstrating that the consumption of such additional substances is consistent with achieving compliance with the applicable NOx limit.

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 April 2008.
2. Notwithstanding the amendments to the Rules, the current requirements may apply to ships for which the date of contract for construction* is before the effective date.
*“contract for construction” is defined in IACS Procedural Requirement(PR) No.29 (Rev.4).

IACS PR No.29 (Rev.4)

1. The date of “contract for construction” of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.
2. The date of “contract for construction” of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.
For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a “series of vessels” if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
 - (1) such alterations do not affect matters related to classification, or
 - (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.
3. If a contract for construction is later amended to include additional vessels or additional options, the date of “contract for construction” for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a “new contract” to which **1.** and **2.** above apply.
4. If a contract for construction is amended to change the ship type, the date of “contract for construction” of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Notes:

1. This Procedural Requirement applies to all IACS Members and Associates.
2. This Procedural Requirement is effective for ships “contracted for construction” on or after 1 January 2005.
3. Revision 2 of this Procedural Requirement is effective for ships “contracted for construction” on or after 1 April 2006.
4. Revision 3 of this Procedural Requirement was approved on 5 January 2007 with immediate effect.
5. Revision 4 of this Procedural Requirement was adopted on 21 June 2007 with immediate effect.

GUIDANCE FOR MARINE POLLUTION PREVENTION SYSTEMS

GUIDANCE

2008 AMENDMENT NO.1

Notice No.10 27th February 2008

Resolved by Technical Committee on 30th November 2007

“Guidance for marine pollution prevention systems” has been partly amended as follows:

Amendment 1-1

Part 3 CONSTRUCTION AND EQUIPMENT FOR THE PREVENTION OF POLLUTION BY OIL

Chapter 4 TRANSITIONAL REQUIREMENTS

4.3 Equipment for the Prevention of Pollution by Oil Carried in Bulk by Oil Tankers

4.3.10 Prevention of Accidental Oil Pollution

Sub-paragraph -1 has been amended as follows.

- 1** The wording “the approval by the Society” specified in **4.3.10-1** and **-3 in Part 3 of the Rules** means the approval by the Administration in accordance with the *Condition Assessment Scheme* adopted by the Maritime Environment Protection Committee by resolution *MEPC.94(46)*, as amended ~~by resolutions *MEPC.99(48)* and *MEPC.112(50)*~~. (refer to **Appendix I** of this Guidance)

Appendix 1 CONDITION ASSESSMENT SCHEME

Referred resolution has been amended as follows.

**Resolution *MEPC.94(46)* adopted on 27 April 2001
and amended by resolutions *MEPC.99(48)* adopted on 11 October 2002,
MEPC.112(50) adopted on 4 December 2003 ~~and,~~
MEPC.131(53) adopted on 22 July 2005
and *MEPC.155(55)* adopted on 13 October 2006**

7 CAS SURVEY REQUIREMENTS

7.3 Extent of thickness measurements

Table 7.3.3 has been amended as follows.

Table 7.3.3

Thickness Measurements Requirements
1. Within the cargo area: .1 Each deck plate (<u>see note</u>) .2 Three transverse sections .3 Each bottom plate
2. Measurements of structural members subject to close-up survey according to 7.2.2, for general assessment and recording of corrosion pattern
3. Suspect areas
4. Selected wind and water strakes outside the cargo area.
5. All wind and water strakes within the cargo area.
6. Internal structure in the fore and aft peak tanks
7. All exposed main deck plates outside the cargo area and all exposed first tier superstructure deck plates

Note:

In conjunction with thickness measurement procedures, in case of concern regarding residual throat thickness of the fillet weld between the deck plate and deck longitudinals or possible detachment of a deck longitudinal member, the attending surveyor may refer to the Guidelines on the assessment of residual fillet weld between deck plating and longitudinals adopted by resolution MEPC.147(54).

13 STATEMENT OF COMPLIANCE

Sections 13.8 to 13.10 have been replaced with the new sections 13.8 to 13.15 as follows.

- ~~13.8 The Administration may consider and declare that the Statement of Compliance of a ship remains valid and in full force and effect if:~~
- ~~.1 the ship is transferred to a RO other than the one that submitted the CAS Final Report that was reviewed and accepted for the issue of the Statement of Compliance; or~~
 - ~~.2 the ship is operated by a Company other than the one that was operating the ship at the~~

~~time of the completion of the CAS survey;
provided the period of validity and the terms and conditions for the issue of the Statement of Compliance in question remain those adopted by the Administration at the time of the issue of the Statement of Compliance.~~

~~13.9 If a ship with a valid Statement of Compliance is transferred to the flag of another Party, the new Administration may issue to that ship a new Statement of Compliance on the basis of the Statement of Compliance issued by the previous Administration, provided that the new Administration:~~

- ~~.1 requests and receives from the previous Administration, in accordance with regulation 10.3, copies of all the CAS documentation relating to that ship which the previous Administration has used for the issue or renewal and the maintenance of the validity of the Statement of Compliance the ship was issued with at the time of the transfer;~~
- ~~.2 establishes that the RO which submitted the CAS Final Reports to the previous Administration is an RO authorized to act on its behalf;~~
- ~~.3 reviews the documentation referred to in subparagraph .1 and is satisfied that the requirements of the CAS are met; and~~
- ~~.4 limits the period and the terms and conditions of validity of the Statement of Compliance to be issued to those established by the previous Administration.~~

~~13.10 The Administration shall:~~

- ~~.1 suspend and/or withdraw the Statement of Compliance of a ship if it no longer complies with the requirements of the CAS; and~~
- ~~.2 withdraw the Statement of Compliance of a ship if it is no longer entitled to fly its flag.~~

13.8 The flag Administration may consider and declare that the Statement of Compliance of a ship entitled to fly its flag remains valid and in full force and effect if:

- .1 a change in ownership of the ship should occur; or
- .2 there is a change in the RO from the RO that performed the CAS survey work and prepared the CAS final report, which was reviewed and accepted by the Administration for the issuance of the Statement of Compliance by the Administration, to a new RO acceptable to the Administration, and that all information required to be submitted under the requirements of this resolution has been provided to the new RO; or
- .3 the safe operation and maintenance of the ship is assumed by a Company, as defined in SOLAS chapter IX, other than the one that was operating the ship at the time of the completion of the CAS survey; or
- .4 any combination of 13.8.1, 13.8.2 and 13.8.3 should simultaneously occur;

provided that the Administration:

- .5 maintains the same period of validity; and
- .6 co-ordinates the transmittal of specific information, requirements, and procedures concerning the maintenance of the validity of the CAS Statement of Compliance in question to the new owner and/or Company, which shall remain those adopted by the Administration at the time of the issue of the original Statement of Compliance.

13.9 The Administration shall suspend and/or withdraw the Statement of Compliance of a ship if it is no longer considered to be compliant with the requirements of the CAS.

13.10 The Administration may reinstate a suspended and/or withdrawn Statement of Compliance when it is satisfied that the requirements of the CAS are again being met, but not beyond the limits of the period and the terms and conditions of validity of the Statement of Compliance previously established by the Administration.

13.11 The Administration shall withdraw the Statement of Compliance of a ship if it is no longer entitled to fly its flag.

13.12 If a ship to which a valid Statement of Compliance has already been issued is transferred to

the flag of another Party, the new Administration may consider issuing a new Statement of Compliance to that ship on the basis of the Statement of Compliance issued by the previous Administration, provided that the new Administration obtains from the previous Administration:

- .1 a certified copy of the Statement of Compliance that the ship was issued with at the time of the transfer;
 - .2 a statement certifying that the RO, which provided the CAS Final Report to the previous Administration, is an RO authorized to act on its behalf;
 - .3 a status report from the RO that provided the CAS Final Report to the previous Administration that, at the time of transfer, all the terms and conditions justifying the issuance of the Statement of Compliance to that ship are still valid and being maintained; and
 - .4 a copy of both the CAS Final Report and the complete Review Record of all the CAS documentation relating to that ship, which the previous Administration has compiled for the issue or renewal and the maintenance of the validity of the Statement of Compliance that the ship was issued with at the time of the transfer.
- 13.13 With a change of flag, for the issuance of an Interim Statement of Compliance issued for a period of not more than 90 days to allow the continued operation of the ship while the new Administration performs a technical review and assessment of the CAS Final Report and Review Record, the new Administration shall need only to depend upon the certifications and status report referred to in paragraph 13.12 and provided by the previous Administration and the responsible RO.
- 13.14 On satisfactory completion of the technical review and assessment of the CAS Final Report and Review Record by the new Administration, under the circumstance of a change of flag as described in paragraph 13.12, a full term Statement of Compliance may be issued by the new Administration limited to the period and no less than the terms and conditions of validity of the Statement of Compliance issued by the previous Administration. In the event the review is unsatisfactory, the new Administration shall revert to the provisions of paragraphs 13.9 and 13.10.
- 13.15 Should a change of flag take place during the course of a CAS survey, the new Administration shall determine at what point in the CAS Schedule provided in annex 3 to MEPC/Circ.390 and under what conditions it will assume responsibility for and allow the CAS survey to continue. Sufficient documentation should be provided by the shipowner and the responsible RO to the new Administration upon which to make its decision.

EFFECTIVE DATE AND APPLICATION (Amendment 1-1)

1. The effective date of the amendments is 1 March 2008.

Part 8 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

Chapter 1 GENERAL

1.1 General

1.1.2 Terminology (*Regulation 2, 13, 14 and 16 of Annex VI and 1.3, 4.1, 4.3.9 and 4.4.7 of NOx Technical Code*)

The current paragraph has been numbered to -1, and sub-paragraph -2 has been newly added as follows.

- 1** The wording “a new engine manufactured on or after 1 January 2000” in **1.1.2(12)(a), Part 8 of the Rules** means an engine that left the manufacture’s work for the first time on or after 1 January 2000.
- 2** For the requirements in **1.1.2(12)(c), Part 8 of the Rules**, the increase in output of diesel engines installed on ships which had been at beginning stage of construction before 1 January 2000 is to be based on the maximum continuous output prior to 1 January 2000.

Chapter 2 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

2.1 Nitrogen Oxides (NOx) (*Regulation 13 of Annex VI*)

2.1.2 Requirements for Installation

Sub-paragraph -1 has been amended as follows.

- 1** To diesel engines used both as the main propulsion machinery and to drive generators, **2.1.2-1(1)(a) or (b), Part 8 of the Rules**, as appropriate, is to be applied. Where a constant speed engine as installed can be used either solely for main propulsion or to drive generators, **2.1.2-1(1)(a) and (b), Part 8 of the Rules** are to be applied.

Sub-paragraph -2(1) has been amended as follows.

- 2** The wording “procedures specified otherwise by the Society” in **2.1.2-1(2), Part 8 of the Rules** means those listed below.
 - (1) Procedures for NOx emission measurements on a test bed

It is to be in accordance with Chapter 5 of *NOx Technical Code*. ~~Moreover, the following (a) through (g) are to be complied with. In this case, the following IACS Unified Interpretations are to apply.~~

- ~~(a) In case an exhaust gas cleaning system to reduce NO_x emissions is installed, the tests are to be carried out on the system actually installed on the parent engine of an engine family or engine group or the engine other than a member of an engine family or engine group.~~
- ~~(b) Where test bed installation prevents adjustment to the exhaust backpressure limit in accordance with 5.2.5 of *NOx Technical Code*, the diesel engine manufacturer, etc. is to state and justify the effect upon the NO_x emissions.~~
- ~~(c) When METHOD 2 specified in APPENDIX 6 of *NOx Technical Code* is used in accordance with 5.5.3 of the Code, the “CW (soot)” term is to be taken as zero.~~
- ~~(d) Notwithstanding 5.6 of *NOx Technical Code*, the measuring instruments as detailed under APPENDIX 4 of the Code are to be in accordance with 1.3.1 of the APPENDIX, and other measuring instruments, when required, are to be calibrated as the calibration is traceable to national or international standards.~~
- ~~(e) The measurement of hydrocarbons is to be undertaken using an analyser of the HFID type calibrated using a suitable hydrocarbon (for example, CH₄ or C₂H₆ in air) calibration and span check gas and applying APPENDIX 4 of *NOx Technical Code* mutatis mutandis. The exhaust gas temperature at the hydrocarbons sampling probe is to be 463 K (190°C) or above. In addition, with regard to the hydrocarbons sampling system, a heated sampling line and a heated filter to extract any solid particles from the gas sample are to be provided between the sampling probe and the analyser. The temperatures of the heated filter and the wall temperature of the heated line are to be 463 K (190°C) ± 10 K in order to maintain the sampled gas at a temperature of 463 K (190°C) ± 10 K.~~
- ~~(f) The data to be incorporated in the test report required in 5.10 of *NOx Technical Code* is, notwithstanding those listed in APPENDIX 5 of the Code, the necessary data to fully define the engine performance and enable calculation of the gaseous emissions, in accordance with 5.12 of the Code, from the raw data units to the cycle weighed NO_x emission value. Where a DM grade fuel is used, sufficient data to justify the ISO 8217 grade (i.e. DMA, DMB or DMC) as given on *EIAPP Certificate Supplement 1.12* is to be included and hence as a minimum the analysis results for water content (*ISO 37733*), carbon residue (*ISO 10370*) and, in the case of the DMA / DMB grades, Cetane Number / Index (*ISO 4264*) are to be given.~~
- ~~(g) The averaged results referred to in 5.11 of *NOx Technical Code* are to be given to 2 decimal places for the CO₂ and O₂ species and whole numbers for the CO, HC and NO_x species.~~

MPC30, MPC34, MPC60, MPC61, MPC62, MPC63, MPC64, MPC65, MPC66, MPC67, MPC68, MPC69, MPC70, MPC71, MPC72, MPC73, MPC74, MPC75, MPC76, MPC80, MPC81

Paragraph 2.1.3 has been amended as follows.

2.1.3 Technical File and Record Book of Engine Parameters

- 1 The wording “on-board engine parameter check method otherwise specified by the Society” in 2.1.3-1(4), Part 8 of the Rules means the method in accordance with 6.2 of *NOx Technical*

Code.

2 The requirements of Chapter 4 of the *NOx Technical Code* in **2.1.3-1(6), Part 8 of the Rules** is to be in accordance with the following IACS Unified Interpretations.

MPC53, MPC54, MPC55, MPC56, MPC57, MPC58, MPC59

23 The wording “specifications of those spare parts/components of the diesel engine” in **2.1.3-1(7), Part 8 of the Rules** means identification marking, such as a part number, tied to a particular drawing or other data, under the control of the diesel engine manufacturer, etc., defining the features of that component with regard to its influence on NOx emission.

EFFECTIVE DATE AND APPLICATION (Amendment 1-2)

1. The effective date of the amendments is 1 April 2008.
2. Notwithstanding the amendments to the Guidance, the current requirements may apply to ships for which the date of contract for construction* is before the effective date.
*“contract for construction” is defined in IACS Procedural Requirement(PR) No.29 (Rev.4).

IACS PR No.29 (Rev.4)

1. The date of “contract for construction” of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.
2. The date of “contract for construction” of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder. For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a “series of vessels” if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
 - (1) such alterations do not affect matters related to classification, or
 - (2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.
3. If a contract for construction is later amended to include additional vessels or additional options, the date of “contract for construction” for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a “new contract” to which **1.** and **2.** above apply.
4. If a contract for construction is amended to change the ship type, the date of “contract for construction” of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Notes:

1. This Procedural Requirement applies to all IACS Members and Associates.
2. This Procedural Requirement is effective for ships “contracted for construction” on or after 1 January 2005.
3. Revision 2 of this Procedural Requirement is effective for ships “contracted for construction” on or after 1 April 2006.
4. Revision 3 of this Procedural Requirement was approved on 5 January 2007 with immediate effect.
5. Revision 4 of this Procedural Requirement was adopted on 21 June 2007 with immediate effect.