

Class Notation for Ships Satisfying Maximum Allowable NOx Emission Limit Criteria

Amended Rules and Guidance

Rules for Marine Pollution Prevention Systems
Guidance for the Classification and Registry of Ships

Reason for Amendment

Requirements related to the criteria for maximum allowable NOx emission limits for diesel engines are specified in Reg. 13 of MARPOL Annex VI. These requirements have already been incorporated into the Society's Rules for Marine Pollution Prevention Systems.

Additionally, the Society stipulates in the Rules for Marine Pollution Prevention Systems and the Guidance for the Classification and Registry of Ships that the notation "Nitrogen Oxides Emission-Tier III" (abbreviated as "NOx-III") is to be affixed to the classification characters of ships installed with diesel engines satisfying the aforementioned maximum allowable NOx emission limit criteria.

Moreover, the following notations are also affixed in parentheses after "NOx-III" according to type of equipment or engine installed to satisfy the NOx emission limit criteria.

- "Selective Catalytic Reduction" (abbreviated as "SCR")
- "Exhaust Gas Recirculation" (abbreviated as "EGR")
- "Dual Fuel Engine" (abbreviated as "DFE")
- "Gas-only Engine" (abbreviated as "GOE")

In recent years, new engine technologies in which water is used as the means for satisfying the NOx emission limit criteria are being developed to serve as alternatives to the equipment and engine types listed above. As a result, the Society has been receiving an increasing number of inquiries/applications related to the approval of such engines.

Accordingly, relevant requirements are amended to accommodate such applications.

Outline of Amendment

Specifies that the notation "Other Technologies" (abbreviated as "Others") is to be affixed in parentheses after "NOx-III" to the classification characters of ships satisfying maximum allowable NOx emission limit criteria using technologies other than SCR, EGR, DFE, and GOE.

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

Part 1 GENERAL

Chapter 1 GENERAL

1.1 General

1.1.4 Class Notations

Sub-paragraph -2 has been amended as follows.

2 Based on **2.1.3-2 of the Rules for the Classification and Registry of Ships**, “*Nitrogen Oxides Emission-Tier III*” (abbreviated as “*NOx-III*”) is to be affixed to the classification characters of ships installed with diesel engines satisfying the maximum allowable NOx emission limit criteria specified in **2.1.2-1(1)(c), of Part 8** which are permitted to operate in NOx emission control areas. For ships using selective catalytic reduction systems, exhaust gas recirculation systems, dual fuel engines ~~or~~, gas-only engines or other technologies to satisfy the maximum allowable NOx emission limit criteria specified in **2.1.2-1(1)(c), Part 8**, the notations referred to in (1) to ~~(4)~~ **(5)** below are listed in parentheses after *NOx-III* according to the type of installed equipment, engine or technology installed. The purposes (including the technology used in the case of engines referred to in (5) below) of engines fitted with the systems referred to in ~~(1) and/or (2)~~ below as well as ~~and~~ the engines referred to in ~~(3) and (4)~~ or (5) below are to be entered in the Classification Register as descriptive notes for the ship.

- (1) Ships using selective catalytic reduction systems complying with **Chapter 21, Part D of the Rules for the Survey and Construction of Steel Ships**:
Selective Catalytic Reduction (abbreviated as “*SCR*”)
- (2) Ships using exhaust gas recirculation systems complying with **Chapter 23, Part D of the Rules for the Survey and Construction of Steel Ships**:
Exhaust Gas Recirculation (abbreviated as “*EGR*”)
- (3) Ships using dual fuel engines complying with **16.1 and 16.7, Part N of the Rules for the Survey and Construction of Steel Ships** or **1.1.3-1(20), Part GF of the Rules for the Survey and Construction of Steel Ships**:
Dual Fuel Engine (abbreviated as “*DFE*”)
- (4) Ships using gas-only engines complying with **1.1.3-1(20), Part GF of the Rules for the Survey and Construction of Steel Ships**:
Gas-only Engine (abbreviated as “*GOE*”)
- (5) Ships using technologies other than those described in (1) to (4) above:
Other Technologies (abbreviated as “*Others*”)

“Guidance for the classification and registry of ships” has been partly amended as follows:

Chapter 2 CLASSIFICATION OF SHIPS

2.1 Classification

2.1.3 Class Notations

Sub-paragraph -3 has been amended as follows.

3 The notations referred to in 2.1.3-2, **Regulations for the Classification and Registry of Ships** are affixed to Classification Characters according to the following (1) and (2).

((1) is omitted)

(2) The notations referred to in (a) and (b) below are affixed to classification characters for the following ships according to 1.1.3, ~~of Part 8 of the Rules for Marine Pollution Prevention Systems~~.

(a) Ships installed with diesel engines satisfying the maximum allowable NO_x emission limit criteria specified in 2.1.2-1(1)(c), ~~of Part 8 of the Rules for Marine Pollution Prevention Systems~~ as an emission control measure and which are permitted to operate in NO_x emission control areas: “*Nitrogen Oxides Emission-Tier III*” (abbreviated as “*NO_x-III*”).

For ships using selective catalytic reduction systems, exhaust gas recirculation systems, dual fuel engines ~~or~~, gas-only engines or other technologies to satisfy the maximum allowable NO_x emission limit criteria specified in 2.1.2-1(1)(c), ~~of Part 8 of the Rules for Marine Pollution Prevention Systems~~, the notations referred to in i) to ~~iv)~~ v) below are listed in parentheses after *NO_x-III* according to the type of installed equipment, engine or technology installed. The purposes (including the technology used in the case of the engines referred to in v) below) of engines fitted with the systems referred to in i) ~~and or ii)~~ below as well as ~~and~~ the engines referred to in iii) ~~and~~ iv) or v) below are to be entered in the Classification Register as descriptive notes for the ship.

i) Ships using selective catalytic reduction systems:

Selective Catalytic Reduction (abbreviated as “*SCR*”)

ii) Ships using exhaust gas recirculation systems:

Exhaust Gas Recirculation (abbreviated as “*EGR*”)

iii) Ships using dual fuel engines:

Dual Fuel Engine (abbreviated as “*DFE*”)

iv) Ships using gas-only engines:

Gas-only Engine (abbreviated as “*GOE*”)

v) Ships using technologies other than those described in i) to iv) above:

Other Technologies (abbreviated as “*Others*”)

((b) is omitted)