

MPC 34 Resolution 2 of the 1997 MARPOL Conference Technical Code on Control of Emission of (July 2004) Nitrogen Oxides from Marine Diesel Engines

Chapter 2.2.5

Chapter 2.2 Procedures for pre-certification of an Engine Group

Chapter 2.2.5 reads as follows:

If the pre-certification test results show that an engine fails to meet the NO_x emission limits as required by regulation 13 of Annex VI, a NO_x-reducing device may be installed. This device, when installed on the engine, must be recognised as an essential component of the engine and its presence will be recorded in the engine's technical file. To receive an EIAPP Certificate for this assembly, the engine, including the reducing device, as installed, must be re-tested to show compliance with the NO_x emission limits. However, in this case, the assembly may be retested in accordance with the simplified measurement method addressed in 6.3. The NO_x-reducing device shall be included on the EIAPP Certificate together with all other records requested by the Administration. The engine's technical file shall also contain on-board NO_x verification procedures for the device to ensure it is operating correctly.

Interpretation:

This section shall be interpreted as follows:

- (a) An engine does not need to be shown, at the pre-certification survey, to fail to meet the Regulation 13 NO_x emission limit requirements before a NO_x reducing device is installed. Where it is intended from the outset that a NO_x reducing device is to be fitted in accordance with Regulation 13(3)(b)(i) then the whole assembly shall be tested in accordance with the requirements of the test bed procedure as specified in Chapter 5.

In those cases where it is proposed that the engine with a NO_x-reducing device is to be tested onboard to demonstrate compliance, as a 'Parent Engine + device' the requirements of 2.2.4 shall apply.

- (b) Where the pre-certification test of an engine, undertaken in accordance with Chapter 5, shows that a NO_x reducing device would need to be fitted in order to meet the Regulation 13 NO_x emission limit requirements, and the whole assembly is subsequently retested in accordance with the simplified measurement method, the test reports from both the engine pre-certification test and the subsequent simplified measurement method test shall be included in the Technical File.

Where the simplified measurement method is used to verify that the whole assembly meets the Regulation 13 NO_x emission limit requirements the allowances as given under 6.3.11 shall not be granted.

- (c) In cases (a) and (b) the approval is on the basis of the complete assembly of engine and NO_x reduction device. Consequently Item 1.15 of the Supplement to EIAPP Certificate shall give the actual NO_x emission value (g/kWh) for the engine with the NO_x reduction device in operation.
- (d) The efficiency of the NO_x-reducing device (as demonstrated) shall be considered as unique to the Engine Group as tested and therefore non-transferable. Hence should the same NO_x - reducing device be used for another Engine Group the whole assemblage (engine + NO_x reducing device) shall be tested. An after-treatment device shall not be certified independent of the engine to which it is to be coupled.

Note:

This UI is to be uniformly implemented by IACS Societies from 19 May 2005.

