MPC 56 (July 2004) Resolution 2 of the 1997 MARPOL Conference Technical Code on Control of Emission of Nitrogen Oxides from Marine Diesel Engines

Chapter 4.3.9.1
Chapter 4.4.7

Chapter 4.3 Application of the engine family concept
Chapter 4.3.9 Guidelines for selecting the parent engine of an engine family

Chapter 4.3.9.1 reads as follows:

The method of selection of the parent engine for NO_x measurement shall be agreed to and approved by the Administration. The method shall be based upon selecting an engine which incorporates engine features and characteristics which, from experience, are known to produce the highest NO_x emissions expressed in grams per kilowatt hour (g/kWh). This requires detailed knowledge of the engines within the family. Under certain circumstances, the Administration may conclude that the worst case NO_x emission rate of the family can best be characterised by testing a second engine. Thus, the Administration may select an additional engine for test based upon features which indicate that it may have the highest NO_x emission levels of the engines within that family. If engines within the family incorporate other variable features which could be considered to affect NO_x emissions, these features must also be identified and taken into account in the selection of the parent engine.

Chapter 4.4.7 Guidelines for the selection of the parent engine of an engine group

Chapter 4.4.7 reads as follows:

The selection of the parent engine shall be in accordance with the criteria in 4.3.9, as applicable. It is not always possible to select a parent engine from small-volume production engines in the same way as the mass-produced engines (engine family). The first engine ordered may be registered as the parent engine. The method used to select the parent engine to represent the engine group shall be agreed to and approved by the Administration.

Interpretation:

For application of these sections it shall be interpreted that where a Parent Engine (e.g. large bore 2-stroke engine) cannot be adjusted (e.g. maximum pressure, compression pressure, exhaust back pressure, charge air temperature) to the defined reference or maximum tolerance conditions at the test bed the measured NO_x emission values shall be corrected to the defined reference and maximum tolerance conditions on the basis of sensitivity tests. This correction shall be approved by the Administration. The resulting corrected average weighted NO_x emission value is to be stated under 1.15 of the EIAPP Certificate.

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