

## TECHNICAL CIRCULAR No. 316 of 8<sup>th</sup> January 2016

To:	All Surveyors/Auditors
Applicable to flag:	All Flags
Subject:	Air Pollution and energy efficiency
Reference:	Engine Certification

## Air Pollution and energy efficiency Engine Certification

The Committee approved amendments to the NOx Technical Code (NTC), with a view to adoption at MEPC 69, for certifying dual fuel and gas-fuel engines. It takes into account resolution MEPC.258(67) which revises the definition of "marine diesel engines" in MARPOL VI to include gas-fueled engines installed on ships constructed on/after 1 March 2016.

These amendments build on previous amendments to the NTC that enabled certification of dual fuel and gas-fuel engines and in particular clarify the manner in which certain provisions of the NTC are applied to "gas only" engines. The amendments are particularly relevant for the utilization of dual fuel and gasfuel engines as a compliance strategy for the Tier III NOx emission standards.

Amendments to MARPOL VI, Regulation 13.5 were also approved, with a view to adoption at MEPC 69, and address record keeping for the operational status of engines that are:

- certified to Tier II and to both the Tier II and Tier III standards; and
- installed onboard ships constructed on/after 1 January 2016 which operate within NOx ECAs.

This record keeping is to be entered in a logbook "as prescribed by the Administration" in a manner that is consistent with the recording of fuel sulphur changeover required by Regulation 14.6. The record shall be made at entry into and exit from the NOx ECA, or when the on/off status changes within such an area, together with the date, time and position of the ship. The NTC should detail how the tier change-over is to be carried out.

Lastly, the Committee approved new circular (MEPC.1/Circ.854) on Guidance on the application of Tier III NOx requirements for dual fuel and gas-fuel engines. The Guidance includes "gas only" engines where ignition is initiated by a spark and dual fuel engines which use gas fuel in a pre-mix combustion process with liquid fuel as the pilot ignition source when in gas mode. Additionally, the Guidelines recognize that the coast/port State has governance over ships that are fitted with these engines which use boil-off gas from cargo tanks when proceeding through an ECA to/from a dry dock or on delivery from a ship yard where gas is not available due to the lack of cargo.

## **Customer Service Center**

5201 Blue Lagoon Drive, 9<sup>TH</sup>. Floor, Miami, Fl., 33126 Tel: 1 (305) 716 4116, Fax: 1 (305) 716 4117, E-Mail:

ioel@conarinagroup.com

Technical Head Office 7111 Dekadine Ct. Spring, Tx., 77379 Tel: 1 (832) 451 0185, 1 (713) 204 6380

E-Mail: cbozenovici@vcmaritime.com

The Guidelines also recommend that auxiliary control devices (used, for example, during low load operation or during maneuvering when liquid fuel exceeds the maximum amount used during the certification cycles) should be denoted in the engine's Technical File and recognizes that such devices are part of the framework limiting dual fuel engine operation in gas mode.

## REFERENCES:

- International Energy Efficiency Certificate. Engine Certification.

ATTACHMENTS: No.

Kindest Regards, Cosmin Bozenovici Naval Architect – Conarina Technical Head Office

**Customer Service Center** 

5201 Blue Lagoon Drive, 9<sup>TH</sup>. Floor, Miami, Fl., 33126 Tel: 1 (305) 716 4116, Fax: 1 (305) 716 4117,

E-Mail:

joel@conarinagroup.com

Technical Head Office 7111 Dekadine Ct. Spring, Tx., 77379 Tel: 1 (832) 451 0185, 1 (713) 204 6380

E-Mail: cbozenovici@vcmaritime.com