

FOBAS Bulletin

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MARPOL Annex VI and the use of Marine Biofuels

Many ship operators over the last few years have been looking at the possibility of using one or the other marine biofuel grades being offered, either as a straight replacement fuel or supplied as a blend component with conventional petroleum derived residual or distillate products; typically, at ratios between 20-50%. However, a major impediment to this biofuel usage in any form has been the requirement under regulation 18.3.2.2 of MARPOL Annex VI that:

‘... fuel oil for combustion purposes derived by methods other than petroleum refining shall not cause an engine to exceed the applicable NO_x emission limit set forth in paragraphs 3, 4, 5.11 and 7.4 of regulation 13’

This has necessitated applications in each instance for an exemption from the flag State to undertake the necessary biofuel trials onboard which of course have had to cover not just the basic functionality of using those fuels but also the determination of NO_x emissions in accordance with the relevant provisions of the NO_x Technical Code 2008 – a complex and time-consuming task with which FOBAS has been assisting a number of ship operators with trial supporting services. [A summary of findings](#) to date was issued earlier this year.

In June MEPC 78 approved a Unified Interpretation (UI) in relation to the use of biofuels – paragraph 13 in the updated consolidated IMO Circular [MEPC.1/Circ.795/Rev.6](#). However, FOBAS has received numerous questions on both this UI itself and how to now proceed where there is the intention to use these biofuels; either as a replacement fuel or as a blend component. To answer these points FOBAS has advised as follows as regards the meaning of this UI:

- Biofuel blends of 30% by volume or less should simply be considered as conventional petroleum derived fuels
- For biofuels and biofuel blends of more than 30% by volume, if NO_x critical components and settings / operational values are as required by an engine’s Technical File then NO_x emission trials should not be required
- For non-petroleum derived fuels other than biofuels the provisions of regulation 18.3.2.2 continue to apply.

In this it is important to note that this is a UI which Administrations are ‘invited to apply’, the actual text of MARPOL Annex VI has not been amended. Consequently, FOBAS would recommend that ship operators now intending to use biofuels or biofuel blends should obtain confirmation from the relevant flag State that they will be following the guidance provided by this UI and that NO_x emission trials would not be required on the basis that the engines in which that fuel is to be used will be retained in a NO_x compliant condition.



Equally, ship operators with existing flag States acceptances as the use of restricted biofuel blends, should obtain confirmation that, if so required, higher ratios of biofuels could now be used without the need for further NOx emission trials.

LR FOBAS support

- FOBAS is able to continue to offer a full range of NOx emission trial support services covering the planning, risk assessments, performance calculation and reporting as may be required where ship operators still intend to undertake such trials as part of an 'in-house' performance assessment.
- Furthermore, FOBAS offers a comprehensive biofuel quality analysis programme to sufficiently characterise the biofuels ensuring trouble free operations onboard.

If you like to discuss any aspect of this bulletin, then please feel free to get in touch with us via email fobas@lr.org.