

The IMO Marine Environment Protection Committee (MEPC) held its 62nd session from 11 to 15 July. Significant actions were taken on pollution prevention measures as highlighted below. A full report of the meeting will be included in the next ABS International Regulatory News Update.

New Ship Energy Efficiency Regulations

The Committee adopted a new Chapter 4 to MARPOL Annex VI, scheduled to enter into force on 1 January 2013, which calls for all *new* ships of 400 gt and above to be certified with an International Energy Efficiency Certificate and have an “Attained EEDI” (Energy Efficiency Design Index) that does not exceed a maximum allowable “Required EEDI”.

New ships are those:

- with a building contract placed on or after 1 January 2013; or
- in the absence of a building contract, the keel of which is laid or which is at a similar stage of construction on or after 1 July 2013; or
- regardless of the building, contract or keel laying date, the delivery is on or after 1 July 2015.

Ships which undergo major conversions are also subject to the EEDI requirement, to varying degrees. All ships are required to be provided with a Ship Energy Efficiency Management Plan (SEEMP) containing procedures to improve the energy efficiency of a ship's operation.

However, the new Chapter 4 also allows an Administration to waive compliance with the EEDI requirements for new ships that are contracted, keel laid or delivered, as appropriate, up to four (4) years after the above mentioned dates.

Required EEDI baseline values are provided for seven types of ships (bulk carriers, gas tankers, tankers (oil, chemical, NLS), container ships, general cargo ships, refrigerated cargo carriers, and combination carriers) for a range of deadweights. The allowable EEDI values reduce in three 10 percent increments for new ships built over a period of 12 years. For example, the allowable EEDI for a ship contracted for construction on or after 1 January 2025 will be 30 percent lower than for the same ship had it been contracted for construction on 1 January 2013. Ships which have diesel-electric propulsion, turbine propulsion or hybrid propulsion systems are exempt until such time as the method of calculation of attained EEDI for these categories of ships is established. Also, specialized dry cargo ships (e.g., barge or heavy lift ships) are exempted at this time.

Clarification of MARPOL I – Oil

The Committee clarified questions raised by IACS by issuing an MEPC Circular that removes the ambiguity concerning the possible retroactive nature of resolution MEPC.187(59), which entered into force on 1 January 2011. The Circular allows for an interconnection between the sludge tank discharge piping and bilge-water piping using common piping leading to the standard discharge connection which had been inadvertently removed in MEPC.187(59). The only other connections that are allowed are manually operated valves to drain settled water from sludge tanks to the oily bilge water system.

The Circular is consistent with ABS' practice which held in abeyance implementation of the retroactive provisions in MEPC.187(59) because we understood that such provisions were unintentional.

Revision of MARPOL V – Garbage

Revisions to MARPOL Annex V were adopted and will enter into force on 1 January 2013. Of the more significant amendments, the discharge of cargo hold cleaning agents and additives classified as being harmful to the marine environment contained in hold wash water is now prohibited. Also, plastics now include synthetic ropes, synthetic fishing nets, plastic garbage bags and incinerator ashes from plastic products, as garbage.

Revision of MARPOL IV – Sewage

The Committee revised MARPOL Annex IV which, upon entry into force on 1 January 2013, will prohibit passenger ships from discharging sewage within a *special area* (currently limited to the Baltic Sea), unless:

- the passenger ship is *en route* at not less than 4 knots and not less than 3 nm from the nearest land;
- the passenger ship has in operation an approved sewage treatment plant which has been certified under resolution MEPC.159(55); and
- the effluent does not produce visible floating solids nor cause discoloration of surrounding water.

New ECA Adopted

The current USA/Canada ECA, which requires the use of 1.0 percent sulphur fuel oil on 1 August 2012, reducing to 0.10 percent on 1 January 2015, is now joined by an additional ECA adopted by MEPC. The new ECA includes the Caribbean waters surrounding the islands of the Commonwealth of Puerto Rico and the United States Virgin Islands, which vary between 20 to 40 nm offshore. The additional ECA requires the use of 1.0 percent sulphur fuel oil on 1 January 2014 reducing to 0.10 percent on 1 January 2015.

Steamships constructed before 1985, which are not designed to use distillate or natural gas fuels, are exempted from the low sulphur fuel requirements when operating in these two ECA's, until 1 January 2020.

NOx Code Revision

The NOx Technical Code was revised to allow for an alternative approach (Scheme B) to be used to certify engines fitted with *selective catalytic reduction* (SCR) units which - due to technical or practical reasons - cannot be pre-certified either on a test bed or on board following the standard Code requirements.

Under Scheme B, modelling procedures are used to estimate the effect that the proposed SCR design and arrangement will have on the NOx emissions from the engine to which it is to be fitted. This modelling is to be validated by testing that can be undertaken using a scaled bench top mock-up operating on synthetic exhaust gas. The entire *Engine Group* (engines that require minor onboard adjustments and modifications) would not be approved until the NOx reduction efficiency, relative to the Parent Engine NOx Technical File, has been demonstrated with the SCR installed onboard.

Due to the uncertainties associated with the robustness of the modelling process and in order to ensure that the particular installation layout has not compromised the performance, shipowners should consider requiring that an acceptable NO_x Reduction Efficiency value is established for each engine fitted with an SCR certified via the Scheme B approach – a provision which was removed from the newly adopted MEPC resolution.

Ballast Water Management

MEPC adopted new procedures for approving *other methods* of ballast water management in accordance with regulation B-3.7 of the BWM Convention. This ensures that *other methods* approved by an Administration are capable of at least achieving equivalence to the level of protection provided by the standards of the BWM Convention. One such system to be evaluated is VIM Ltd.'s AUBAFLOW which allows sea water to flow through a ship as it moves through the water. The flow through the double bottom is driven by the pressure created as the ship moves through the water.

MEPC agreed with the IACS interpretation on the application of the D-2 biological standard to ships with a ballast water capacity of 5,000 m³ or more that were/are constructed in 2009, 2010 and 2011. These ships will be required to comply with the D-2 standard not later than the first intermediate or renewal survey, whichever occurs first, after the anniversary date of delivery of the ship in 2016. (A few Administrations had understood that these ships needed to comply with the D-2 standard on 1 January 2016.)

Also agreed was the IACS proposed revision of the Guidelines on design and construction to facilitate sediment control on ships (G12) contained in resolution MEPC.150(55) that the design of ballast water systems should provide for a high sea suction point on each side of the ship. Prior to this, the G12 Guidelines recommended installation of high sea suction points on each side of the tank.

Ship Recycling

Two Guidelines supporting the Ship Recycling Convention were agreed by MEPC. The text that addresses common areas in both documents has been revised so as to provide consistency

- The *2011 Guidelines for the development of the Ship Recycling Plan* are aimed primarily at Ship Recycling Facilities taking into account information provided by the shipowner. The Plan is to describe how the Ship Recycling Facility will manage and recycle the specific ship in a safe and environmentally sound manner, covering the recycling process steps and their sequence over the entire process taking into account the Inventory of Hazardous Material identified onboard.
- The *2011 Guidelines for the development of the Inventory of Hazardous Materials* provide essential requirements for practical and logical development of the Inventory by shipbuilders, equipment suppliers, repairers, shipowners and ship management companies. The Guidelines revise the current resolution MEPC.179(59) and provide ship-specific information on the actual Hazardous Materials on board so as to protect health and safety of personnel.

Black Carbon in the Arctic region

The Committee, recognizing that it is premature to regulate Black Carbon from shipping in the Arctic region, agreed to task the BLG Sub-Committee to develop a definition for Black Carbon emissions from international shipping; identify the most appropriate method for measuring Black Carbon emissions and investigate appropriate emission controls available. The results of this investigation are to be submitted to MEPC 65 in July 2013.

Onboard Bio-fuel Blending

MEPC approved a new Circular on Guidelines for the carriage of blends of petroleum oil and bio-fuels which distinguishes requirements for Bio-fuel blends containing:

- 75 percent or more of petroleum oil – this is subject to MARPOL Annex I carriage requirements,
- more than 1 percent but less than 75 percent of petroleum oil – this is subject to new MARPOL Annex II carriage requirements as contained in the Circular
- 1 percent or less petroleum oil – this is subject to MARPOL Annex II carriage requirements.

Physical blending (mixing), as opposed to any chemical processing, is prohibited at sea except on ships which facilitate exploitation of sea-bed mineral resources (OSVs).