4 ALBERT EMBANKMENT LONDON SE1 7SR

Telephone: +44 (0)20 7735 7611 Fax: +44 (0)20 7587 3210

MEPC.1/Circ.761 4 August 2011

2011 GUIDELINES FOR THE CARRIAGE OF BLENDS OF PETROLEUM OIL AND BIO-FUELS

- 1 The Marine Environment Protection Committee, at its sixty-second session (11 to 15 July 2011), recognizing the need to clarify how bio-fuels subject to MARPOL Annex II, when blended with petroleum oils, subject to Annex I of MARPOL, can be shipped in bulk, approved the 2011 Guidelines for the carriage of blends of petroleum oil and bio-fuels, which are attached at annex.
- 2 In approving the 2011 Guidelines, the Committee agreed that these should become operative from 1 September 2011 and that until that time, the current interim guidance measures which have been in place should remain in effect.
- 3 Member Governments and international organizations are invited to bring the annexed Guidelines to the attention of Administrations, recognized organizations, port authorities, shipowners, ship operators and other parties concerned.



ANNEX

2011 GUIDELINES FOR THE CARRIAGE OF BLENDS OF PETROLEUM OIL AND BIO-FUELS

1 APPLICATION

1.1 These guidelines apply to ships when carrying in bulk blends of Petroleum Oil and Bio-Fuels subject to Annex I and Annex II of MARPOL, respectively.

2 SCOPE

2.1 These Guidelines have been developed to clarify how bio-fuels subject to Annex II of MARPOL, when blended with petroleum oils, subject to Annex I of MARPOL, can be shipped in bulk.

3 DEFINITIONS

For the purpose of these guidelines:

- 3.1 *Bio-fuels* are ethyl alcohol, fatty acid methyl esters (FAME), vegetable oils (triglycerides) and alkanes (C10-C26), linear and branched with a flashpoint of either 60°C or less or more than 60°C, as identified in chapters 17 and 18 of the IBC Code or the MEPC.2/Circular/tripartite agreements. Following the distribution of these guidelines, further bio-fuels identified as falling under the scope of the guidelines, will be recorded in annex 11 of the MEPC.2/Circular which deals with bio-fuel/petroleum oil blends.
- 3.2 *Bio-fuel blends* are mixtures resulting from the blending of those products identified at 3.1 above with a petroleum oil.

4 CARRIAGE OF BIO-FUEL BLENDS

The carriage provision for bio-fuel blends is based on the volumetric composition of the blends as follows:

4.1 Bio-fuel blends containing 75% or more of petroleum oil

- 4.1.1 When containing 75% or more of petroleum oil, the bio-fuel blend is subject to Annex I of MARPOL.
- 4.1.2 When carrying such bio-fuel blends, Oil Discharge Monitoring Equipment (ODME see resolution MEPC.108(49)) shall be in compliance with regulation 31 of Annex I of MARPOL and should be approved for the mixture being transported.
- 4.1.3 Until 1 January 2016 bio-fuel blends may be carried when the ship's ODME is not in compliance with paragraph 4.1.2 above provided that tank residues and all tank washings are pumped ashore.
- 4.1.4 When considering the deck fire-fighting system requirements of SOLAS chapter II-2, regulations 1.6.1 and 1.6.2, when carrying bio-fuel blends containing ethyl alcohol then alcohol resistant foams should be used.

4.2 Bio-fuel blends containing more than 1% but less than 75% of petroleum oil

4.2.1 When containing more than 1% but less than 75% of petroleum oil, the bio-fuel blends are subject to Annex II of MARPOL and should be carried under the following conditions:

а	С	d	е	f	g	h	i'	i"	i'''	j	k	I	n	0
Bio-fuel blends of Diesel/gas	Х	S/P	2	2G	Cont	No	-	-	Yes	C	Т	ABC	No	15.12,
oil and FAME														15.17,
(>25% but <99% by volume)														15.19.6
Bio-fuel blends of Diesel/gas	Х	S/P	2	2G	Cont	No	-	-	Yes	С	Т	ABC	No	15.12,
oil and Vegetable oil														15.17,
(>25% but <99% by volume)														15.19.6
Bio-fuel blends of Gasoline	Х	S/P	2	2G	Cont	No	Т3	IIA	No	С	F-T	AC	No	15.12,
and Ethyl alcohol														15.17,
(>25% but <99% by volume)														15.19.6
Bio-fuel blends of Diesel/gas	Χ	S/P	2	2G	Cont	No	-	-	Yes	С	Т	ABC	No	15.12,
oil and Alkanes (C10-C26),														15.17,
linear and branched with a														15.19.6
flashpoint > 60°C														
(>25% but <99% by volume)														
Bio-fuel blends of Diesel/gas	Х	S/P	2	2G	Cont	No	Т3	IIA	No	С	F-T	ABC	No	15.12,
oil and Alkanes (C10-C26),														15.17,
linear and branched with a														15.19.6
flashpoint <u>≤</u> 60°C														
(>25% but <99% by volume)														

4.2.2 With respect to new bio-fuels identified as falling under the scope of these guidelines, carriage requirements for specific bio-fuel/petroleum oil blends to be shipped as MARPOL Annex II cargoes will be incorporated into List 1 of the MEPC.2/Circular, as appropriate.

4.3 Bio-fuel blends containing 1% or less petroleum oil

4.3.1 When containing 1% or less of petroleum oil, the bio-fuel blends are subject to Annex II of MARPOL.

5 BLENDING OF PETROLEUM OIL AND BIO-FUEL ON BOARD

- 5.1 Blending on board describes the mixing of two products resulting in one single product (a blended mixture) and reflects only physical mixing as distinct from any chemical processing. Such mixing operations should only be undertaken whilst the ship is within port limits.
- 5.2 The physical blending on board of petroleum oil and bio-fuels during a sea voyage to create new products is prohibited as indicated in MSC-MEPC.2/Circ.8 Prohibition of Blending MARPOL Cargoes on Board During the Sea Voyage.

6 CERTIFICATION REQUIREMENTS

6.1 The certification for the bio-fuel blend to be shipped should be in compliance with Annex I or Annex II of MARPOL, as appropriate.

I:\CIRC\MEPC\01\761.doc