### ANNEX

# ANNEX I

# EQUIVALENT EMISSION VALUES FOR EMISSION ABATEMENT METHODS AS REFERRED TO IN ARTICLE 4c(2)

Marine fuel sulphur limits referred to in Articles 4a and 4b and regulations 14.1 and 14.4 of Annex VI to MARPOL and corresponding emission values referred to in Article 4c(2):

Marine fuel Sulphur Content (% m/m)	Ratio Emission SO <sub>2</sub> (ppm)/CO <sub>2</sub> (% v/v)
3,5	151,7
1,5	65,0
1,0	43,3
0,5	21,7
0,1	4,3

Note:

- The use of the Ratio Emissions limits is only applicable when using petroleum based Distillate or Residual Fuel Oils.
- In justified cases where the CO<sub>2</sub> concentration is reduced by the exhaust gas cleaning (EGC) unit, the CO<sub>2</sub> concentration may be measured at the EGC unit inlet, provided that the correctness of such a methodology can be clearly demonstrated.

#### ANNEX II

### CRITERIA FOR THE USE OF EMISSION ABATEMENT METHODS REFERRED TO IN ARTICLE 4c(3)

The emission abatement methods referred to in Article 4c shall comply at least with the criteria specified in the following instruments, as applicable:

Emission abatement method	Criteria for use
Mixture of marine fuel and boil-off gas	Commission Decision 2010/769/EU of 13 December 2010 on the establishment of criteria for the use by liquefied natural gas carriers of technological methods as an alternative to using low sulphur marine fuels meeting the requirements of Article 4b of Council Directive 1999/32/EC relating to a reduction in the sulphur content of certain liquid fuels as amended by Directive 2005/33/EC of the European Parliament and of the Council on the sulphur content of marine fuels <sup>a</sup> .
<b>a</b> OJ L 328, 14.12.2010, p. 15.	
<b>b</b> OJ L 140, 5.6.2009, p. 16.	

Exhaust gas cleaning systems	Resolution MEPC.184(59) adopted on 17 July 2009 "Wash water resulting from exhaust gas cleaning systems which make use of chemicals, additives, preparations and relevant chemical created in situ", referred to in point 10.1.6.1 of Resolution MEPC.184(59), shall not be discharged into the sea, including enclosed ports, harbours and estuaries, unless it is demonstrated by the ship operator that such wash water discharge has no significant negative impacts on and do not pose risks to human health and the environment. If the chemical used is caustic soda it is sufficient that the washwater meets the criteria set out in Resolution MEPC.184(59) and its pH does not exceed 8,0.
Biofuels	Use of biofuels as defined in Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources <sup>b</sup> that comply with the relevant CEN and ISO standards. The mixtures of biofuels and marine fuels shall comply with the sulphur standards set out in Article 3a, Article 4a(1), (1a) and (4) and Article 4b of this Directive.
<b>a</b> OJ L 328, 14.12.2010, p. 15.	
<b>b</b> OJ L 140, 5.6.2009, p. 16.	