ANNEX I

EQUIVALENT EMISSION VALUES FOR EMISSION ABATEMENT METHODS AS REFERRED TO IN ARTICLE 8(2)

Marine fuel sulphur limits referred to in Articles 6 and 7 of this Directive and Regulations 14.1 and 14.4 of Annex VI to MARPOL and corresponding emission values referred to in Article 8(2):

| Marine fuel Sulphur Content (% m/m) | Ratio Emission SO ₂ (ppm)/CO ₂ (% v/v) |
|-------------------------------------|--|
| 3,50 | 151,7 |
| 1,50 | 65,0 |
| 1,00 | 43,3 |
| 0,50 | 21,7 |
| 0,10 | 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 CO₂ concentration is reduced by the exhaust gas cleaning (EGC) unit, the CO₂ 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 AS REFERRED TO IN ARTICLE 8(4)

The emission abatement methods referred to in Article 8 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 ^a . |
| Exhaust gas cleaning systems | Resolution MEPC.184(59) adopted on 17 July 2009 'Washwater resulting from exhaust gas cleaning systems which make use of chemicals, additives, preparations and relevant chemicals created <i>in situ</i> '. |

- a 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 (OJ L 328, 14.12.2010, p. 15).
- b 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 and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ L 140, 5.6.2009, p. 16).

| | 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 washwater discharge has no significant negative impacts on and does 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 ^b 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 5, Article 6(1), (2) and (5) and Article 7 of this Directive. |

- a 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 (OJ L 328, 14.12.2010, p. 15).
- b 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 and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ L 140, 5.6.2009, p. 16).

ANNEX III

PART A

Repealed Directive with list of the successive amendments thereto

(referred to in Article 19)

| Council Directive 1999/32/EC (OJ L 121, 11.5.1999, p. 13) | |
|---|-----------------------------|
| Regulation (EC) No 1882/2003 of the European Parliament and of the Council (OJ L 284, 31.10.2003, p. 1) | Point 19 of Annex I only |
| Directive 2005/33/EC of the European Parliament and of the Council (OJ L 191, 22.7.2005, p. 59) | |
| Regulation (EC) No 219/2009 of the European Parliament and of the Council (OJ L 87, 31.3.2009, p. 109) | Point 3.4 of the Annex only |

| Directive 2009/30/EC of the European Parliament and of the Council (OJ L 140, 5.6.2009, p. 88) | Article 2 only |
|---|----------------|
| Directive 2012/33/EU of the European Parliament and of the Council (OJ L 327, 27.11.2012, p. 1) | |

PART B

Time limits for transposition into national law

(referred to in Article 19)

| Directive | Time limit for transposition |
|------------|------------------------------|
| 1999/32/EC | 1 July 2000 |
| 2005/33/EC | 11 August 2006 |
| 2009/30/EC | 31 December 2010 |
| 2012/33/EU | 18 June 2014 |

ANNEX IV

CORRELATION TABLE

| Directive 1999/32/EC | This Directive |
|---|---|
| Article 1(1) | Article 1(1) |
| Article 1(2), subparagraph 2, introductory wording | Article 1(2), subparagraph 2, introductory wording |
| Article 1(2), subparagraph 2, (a), (b) and (c) | Article 1(2), subparagraph 2, (a), (b) and (c) |
| Article 1(2), subparagraph 2, (d), introductory wording | Article 1(2), subparagraph 2, (d), introductory wording |
| Article 1(2), subparagraph 2, (d), first indent | Article 1(2), subparagraph 2, (d)(i) |
| Article 1(2), subparagraph 2, (d), second indent | Article 1(2), subparagraph 2, (d)(ii) |
| Article 1(2), subparagraph 2, (e) to (h) | Article 1(2), subparagraph 2, (e) to (h) |
| Article 2, introductory wording | Article 2, introductory wording |
| Article 2, point 1 | Article 2(a) |
| Article 2, point 1, first indent | Article 2(a)(i) |
| Article 2, point 1, second indent | Article 2(a)(ii) |
| Article 2, point 2 | Article 2(b) |

| Article 2, point 2, first indent | Article 2(b)(i) |
|-----------------------------------|-----------------------------|
| Article 2, point 2, second indent | Article 2(b)(ii) |
| Article 2, point 2, final wording | Article 2(b), final wording |
| Article 2, point 3 | Article 2(c) |
| Article 2, point 3a | Article 2(d) |
| Article 2, point 3b | Article 2(e) |
| Article 2, point 3c | Article 2(f) |
| Article 2, point 3d | Article 2(g) |
| Article 2, point 3e | Article 2(h) |
| Article 2, point 3f | Article 2(i) |
| Article 2, point 3g | Article 2(j) |
| Article 2, point 3h | Article 2(k) |
| Article 2, point 3i | Article 2(l) |
| Article 2, point 3k | Article 2(m) |
| Article 2, point 31 | Article 2(n) |
| Article 2, point 3m | Article 2(o) |
| Article 2, point 4 | Article 2(p) |
| Article 2, point 5 | Article 2(q) |
| Article 3 | Article 3 |
| Article 3a | Article 5 |
| Article 4 | Article 4 |
| Article 4a(1) | Article 6(2) |
| Article 4a(1a) | Article 6(1) |
| Article 4a(2) | Article 6(3) |
| Article 4a(3) | Article 6(4) |
| Article 4a(4) | Article 6(5) |
| Article 4a(5) | Article 6(6) |
| Article 4a(5a) | Article 6(7) |
| Article 4a(5b) | Article 6(8) |
| Article 4a(6) | Article 6(9) |
| Article 4a(7) | Article 6(10) |
| Article 4b | Article 7 |
| Article 4c(1) and (2) | Article 8(1) and (2) |
| Article 4c(2a) | Article 8(3) |

| Article 4c(3) | Article 8(4) |
|----------------------|------------------------------|
| Article 4c(4) | Article 8(5) |
| Article 4d | Article 9 |
| Article 4e | Article 10 |
| Article 4f | Article 11 |
| Article 5 | Article 12 |
| Article 6(1) | Article 13(1) |
| Article 6(1a) | Article 13(2) |
| Article 6(2) | Article 13(3) |
| Article 6(1b) | Article 13(4) |
| Article 7(1) and (2) | Article 14(1) and (2) |
| Article 7(1a) | Article 14(3) |
| Article 7(3) | _ |
| Article 7(4) | Article 15 |
| Article 9 | Article 17 |
| Article 9a | Article 16 |
| Article 10 | _ |
| Article 11(1) | Article 18, first paragraph |
| Article 11(2) | Article 18, second paragraph |
| _ | Article 19 |
| Article 12 | Article 20 |
| Article 13 | Article 21 |
| Annexes I and II | Annexes I and II |
| _ | Annex III |
| | Annex IV |
| | |