



MSN 1819 (M+F)

Amendment

POLLUTION: Merchant Shipping (Prevention of Air Pollution from Ships) and Motor Fuel (Composition and Content) (Amendment) Regulations 2014 (2014 No.3076)

Notice to all owners, ship operators and managers, charterers, masters and officers of merchant ships, shipbuilders, ship repairers, port authorities, engine manufacturers, fuel suppliers, operators of fixed and floating platforms and drilling rigs

This notice should be read with the Merchant Shipping (Prevention of Air Pollution from Ships) and Motor Fuel (Composition and Content) (Amendment) Regulations 2014 and Merchant Shipping Notice 1819

Summary

This Merchant Shipping Notice replaces schedule 3 (Sulphur Oxides) and Appendix 5 (Form of the UKAPP Certificate) and Appendix 6 (Marine fuel sulphur record book) of the existing MSN 1819.

It details technical aspects of the Merchant Shipping (Prevention of Air Pollution from Ships) and Motor Fuel (Composition and Content) (Amendment) Regulations 2014 that amend the UK regime for the control of air pollution from ships to bring it in line with prevailing international and EU law.

1. Introduction

The purpose of this Merchant Shipping Notice is to detail the technical aspects of the United Kingdom's implementation of the Merchant Shipping (Prevention of Air Pollution from Ships) and Motor Fuel (Composition and Content) (Amendment) Regulations 2014.

The new Statutory Instrument amends the Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008/2924 (as amended) to take account of changes to the regime governing the sulphur content of marine fuels set out in Council Directive 2012/33/EU. These changes were necessary to reflect the amendments made to Annex VI of MARPOL in 2008.



MSN 1819 contains a list of Schedules of which Schedule 3 concerns Sulphur Oxides. For ease, this MSN replaces Schedule 3 and includes the original sections 1 -3 (SO_x Emission Control Areas, Waste Streams from Exhaust Gas Cleaning Systems (EGCS-SO_x) and the requirement to record changeover of fuel before entry into a SECA) which remain the same as in the original MSN 1819. Sections 4 -7 are additional and reflect the new requirements.

Appendices 5 (Form of the United Kingdom Air Pollution Prevention certificate) and 6 (Marine Fuel Sulphur record Book) have also been amended and are included in their entirety in this MSN.

Background to the Changes

Harmful pollutant emissions from ships are primarily regulated on an international basis by the International Maritime Organization (IMO) through Annex VI to the International Convention for the Prevention of Pollution from Ships (MARPOL). The original Annex VI of MARPOL (added in a protocol to the convention in 1997) established sulphur limits for marine fuels. As sulphur emissions are a matter of significant Community interest, the MARPOL standards were incorporated into Community law through Directive 1999/32/EC relating to a reduction in the sulphur content of certain liquid fuels and its subsequent amendment Directive 2005/33/EC.

Previously, the EU Sulphur Directive provided that vessels at berth in European Member State ports could not use marine fuels with a sulphur content exceeding 0.1% and that Member States must ensure the sulphur content of marine fuels used within Sulphur Emission Control Areas ("SECAs"), or by passenger ships operating on regular services to or from any EU port, does not exceed 1.5%.

In October 2008, the IMO formally adopted the revised Annex VI, which includes the staged introduction of significantly stricter sulphur limits in fuel. As a result Directive 1999/32/EC required further amendment to reflect prevailing international standards. These amendments were agreed in late 2012 and formed Council Directive 2012/33/EU.



Revised Schedule 3 (this schedule replaces that found in MSN 1819)

Schedule 3

1 SOx Emission Control Areas

1.1 For the purpose of Regulation 22 of the Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008 as amended, SOx emission control areas include:

- (a) the Baltic Sea proper with the Gulf of Bothnia, the Gulf of Finland and the entrance to the Baltic Sea bounded by the parallel of the Skaw in the Skagerrak at latitude 57° 44'.8 N.
- (b) the North Sea being all sea areas within the following boundaries including the North Sea proper and the English Channel and its approaches:
 - (i) the North Sea southwards of latitude 62° N and eastwards of longitude 4°W;
 - (ii) the Skagerrak, the southern limit of which is determined east of the Skaw by latitude 57° 44'.8 N; and
 - (iii) the English Channel and its approaches eastwards of longitude 5° W and northwards of latitude 48° 30' N.
 - (iv) the North American area as described by the coordinates provided in appendix VII of MARPOL Annex VI.
- (c) Any other SOx emission control areas agreed at IMO will be promulgated in a Merchant Shipping Notice.

2 Waste Streams from Exhaust Gas Cleaning Systems (EGCS-SOx)

2.1 Regulation 22(4) of the Merchant Shipping (Prevention of Air Pollution from Ships) Regulations 2008 requires that the master of any ship must ensure that waste streams from the use of exhaust gas cleaning systems equipment are not discharged into any port, harbour or estuary unless it is thoroughly documented that the waste streams will have no adverse impact on the ecosystem of the port, harbour or estuary.

2.2 The master of any ship within United Kingdom waters that is to use an exhaust gas cleaning system shall provide documentation that demonstrates that waste streams discharged to the sea will have no adverse impact on the ecosystem of that port, harbour or estuary. Such documentation shall be forwarded to the Maritime and Coastguard Agency via the environment@mca.gov.uk email address.



3 Requirement to record changeover of fuel before entry into a SECA

3.1 There is a requirement in Schedule 2A of the Merchant Shipping (Prevention of Air Pollution from Ships) 2008 as amended to complete a log book entry indicating the vessel has changed to low sulphur fuel oil on entry to SECA.

3.2 The form of this log book is outlined at Appendix 6 of this Merchant Shipping Notice – Marine Fuel Sulphur Record Book.

4. This table provides the equivalent emission values for emission abatement methods for respective marine fuel sulphur content as required in Schedule 2A

EQUIVALENT EMISSION VALUES FOR EMISSION ABATEMENT METHODS AS REFERRED TO IN Schedule 2A

Marine fuel sulphur limits referred to in regulations 14.1 and 14.4 of Annex VI to MARPOL and corresponding emission values are referred to in the following table:

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.

5. The provision that requires the approval of any other technological method in paragraph 2 of Schedule 2 A is as follows:

Emission abatement methods not covered by EU Council Directive 96/98/EC shall be approved in accordance with the procedure referred to in Article 3(2) of Regulation (EC) No 2099/2002 of the European Parliament and of the Council of 5 November 2002 establishing a Committee on Safe Seas and the Prevention of Pollution from Ships (COSS) OJ L 324, 29.11.2002, p.1), taking into account:

- 5.1 guidelines developed by the IMO;
- 5.2 the results of any trials conducted under paragraph 6 (4) (b) of Schedule 2 A;
- 5.3 effects on the environment, including achievable emission reductions, and impacts on ecosystems in enclosed ports, harbours and estuaries; and
- 5.4 the feasibility of monitoring and verification.

6. The criteria to be fulfilled for paragraph 5 of this Merchant Shipping Notice for the use of emission abatement methods is as follows:



**CRITERIA FOR THE USE OF EMISSION ABATEMENT METHODS REFERRED TO IN
SCHEDULE 2 A**

The emission abatement methods referred to in paragraph 1 of Schedule 2 A shall comply at least with the criteria 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 (OJ L 328, 14.12.2010, p.15).
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 ME PC.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 (OJ L 140, 5.6.2009, p.16) 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.

7 If a ship is found not to be in compliance with the standards for marine fuels which comply with Regulation 25 (6) of the Merchant Shipping (Prevention of Air Pollution from Ships) 2008 as amended, the Secretary of State will require the ship to:

7.1 present a record of the actions taken to attempt to achieve compliance; and

7.2 provide evidence that it attempted to purchase marine fuel which complies with Regulation 25 (6) in accordance with its voyage plan and, if it was not made available where planned, that



attempts were made to locate alternative sources for such marine fuel and that, despite best efforts to obtain marine fuel which complies with Regulation 25(6), no such marine fuel was made available for purchase.

7.3 The ship shall not be required to deviate from its intended voyage or to delay unduly the voyage in order to achieve compliance.

7.4 If a ship provides the information referred to in the first subparagraph, the Secretary of State shall take into account all relevant circumstances and the evidence presented to determine the appropriate action to take, including not taking control measures.

7.5 A ship shall notify its flag State, and the competent authority of the relevant port of destination in the UK, when it cannot purchase marine fuel which complies with Regulation 25 (6).

7.6 The Secretary of State shall notify the Commission when a ship has presented evidence of the non-availability of marine fuels which comply with Regulation 25(6)



Amendment to Appendix 5 of MSN 1819

Sulphur oxides (SO_x) (Regulation 22)

2.3.1 When the ship operates within an SO_x emission control area specified in Regulation 22, the ship uses:

- .1 fuel oil with a sulphur content that does not exceed Regulation 25 (6) (a) as documented by bunker delivery notes; or
- .2 unit approved exhaust gas cleaning installation/s issued with an approved Shipboard SO_x Emission Compliance Plan and SO_x Emission Compliance Certificate (if applicable) which demonstrates SO_x emission is in compliance with Regulation 25(6)(a) ; or
- .3 other approved technology which demonstrate SO_x emissions is in compliance with Regulation 25(6) (a)

Note: The relevant SO_x Emission Compliance Certificate/s and SO_x Emission Compliance Plan must be attached to this document



Amendment to Appendix 6 of MSN 1819

Example of a Marine Fuel Sulphur Record Book

Ships Name:

IMO Number:

Distinctive Number/letters:

Note: An entry must be made before the vessel enters any SECA to confirm compliance with the requirement to use low sulphur fuel oil Regulation 25 (6) (a)

SECA	Date and time of entry into SECA	Date and time changeover completed	Position changeover completed	Volume of low sulphur fuel remaining (per tank)	Signature

Masters Signature:

Date:



More Information

Environmental Policy
Maritime and Coastguard Agency
Bay 2/29
Spring Place
105 Commercial Road
Southampton
SO15 1EG

Tel : +44 (0) 23 8032 9199
Fax : +44 (0) 23 8032 9204
e-mail: bennet.ng@mcga.gov.uk

General Inquiries: infoline@mcga.gov.uk

MCA Website Address: www.gov.uk/government/organisations/maritime-and-coastguard-agency

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