



Barbados Maritime Ship Registry



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Notice to: Shipowners, Operators, Officers, Flag State Inspectors and Recognised Organisations.

1. References

- a) Barbados Merchant Shipping Act (CAP 296).
- b) Barbados Shipping (Oil Pollution) Act (CAP296A).
- c) International Convention for the Prevention of Pollution from Ships (MARPOL).
- d) NOX Technical Code 2008 (NTC 2008).
- e) [MEPC.1/Circ.892](#) Guidelines for exemption of unmanned non-self-propelled (UNSP) barges from the survey and certification requirements under the MARPOL Convention.
- f) [Resolution MEPC.340\(77\)](#) 2021 Guidelines for Exhaust Gas Cleaning System.
- g) [MEPC.1/Circ.795/Rev.2](#), Unified Interpretations to MARPOL Annex VI.
- h) [Resolution MEPC.364\(79\)](#) 2022 Guidelines on the Method of Calculation of the Attained EEDI for New Ships.
- i) [Resolution MEPC.333\(76\)](#) 2021 Guidelines on the Method of Calculation of the Attained (EEXI).
- j) [Resolution MEPC.324\(75\)](#) Procedures for sampling and verification of the sulphur content of fuel oil and the Energy Efficiency Design Index (EEDI).
- k) [Resolution MEPC.320\(74\)](#) 2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI.
- l) [MEPC.1/Circ.881](#) Guidance for port State control on contingency measures for addressing non-compliant fuel oil;
- m) [MEPC.1/Circ.864/Rev.1](#) 2019 *Guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships.*
- n) [MEPC.1/Circ.889](#) 2020 Guidelines for on board sampling of fuel oil intended to be used or carried for use on board a ship.
- o) [MEPC.1/Circ.884/Rev.1](#) *Guidance for best practice for Member State/coastal State.*
- p) [Resolution MEPC.346\(78\)](#) 2022 *Guidelines for the development of a ship energy efficiency management plan (SEEMP).*
- q) [Bulletin 008](#) – Permits Exemptions and Equivalences.
- r) [Resolution MEPC.348\(78\)](#) 2022 Guidelines for Administration verification of ship fuel oil consumption data and operational carbon intensity.
- s) [MEPC.1-Circ.876](#) Sample Format for The Confirmation Of Compliance, Early Submission Of The SEEMP Part II etc.
- t) [Regulation \(EU\) 2015/757](#) on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC.
- u) [SI 2018/1388](#) The Merchant Shipping (Monitoring, Reporting and Verification of Carbon Dioxide Emissions) (Amendment) (EU Exit) Regulations 2018.
- v) [MIN 669 \(M+F\)](#) Amendments 1 - Reporting Emissions Data into the UK MRV Regime.
- w) [Resolution MEPC.335\(76\)](#) 2021 Guidelines on the shaft/engine power limitation system to comply with the EEXI requirements and use of a power reserve.
- x) [Resolution MEPC.375\(80\)](#) Amendments to the 2021 Guidelines on the shaft/engine power limitation system to comply with the EEXI requirements and use of a power reserve (res. MEPC.335(76)).

2. Purpose

- 2.1 This Bulletin outlines the requirements of MARPOL Annex VI, and specifically Chapter 3 requirements for control of emissions and Chapter 4 requirements to reduce the carbon intensity for Barbadian vessels.
- 2.2 MARPOL Annex VI sets limits on vessel sulphur oxide (SOX) and nitrogen oxide (NOX) emissions. It regulates the deliberate emissions of ozone-depleting substances (ODS), the emissions of volatile organic compounds (VOCs) from tankers, and the incineration of certain products on board vessels. It also establishes fuel oil quality standards.

3. Application

- 3.1 The MARPOL Annex VI Chapter 3 requirements apply to all Barbadian vessels, regardless of tonnage, except where expressly provided otherwise.
- 3.2 The MARPOL Annex VI Chapter 4 requirements apply to Barbadian vessels of 400 gross tonnage (GT) and above, except where expressly provided otherwise as detailed in the relevant sections below.
- 3.3 The MARPOL Annex VI Chapter 4 requirements do not apply to vessels not propelled by mechanical means, platforms including Floating Production, Storage and Offloading Facilities (FPSOs) and Floating Storage Units (FSUs), and drilling rigs regardless of their propulsion and vessels operating in Barbados national waters.

4. Definitions

- 4.1 For the purposes of the MARPOL Annex VI Chapter 4, the definition of “New ship”, Major conversion MARPOL Annex VI Reg. 2, as per MEPC.1/Circ.795/Rev.2 defines the following terms:
- .1 “**New ship**” means a vessel:
- i) for which the building contract is placed on or after 01 January 2013; or
 - ii) 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 01 July 2013; or
 - iii) the delivery of which is on or after 01 July 2015.
- .2 “**Major Conversion**” means a conversion of a vessel:
- i) which substantially alters the dimensions, carrying capacity, or engine power of the vessel; or
 - ii) which changes the type of the vessel; or
 - iii) the intent of which in the opinion of the Administration is substantially to prolong the life of the vessel; or
 - iv) which otherwise so alters the vessel that, if it were a new ship, it would become subject to relevant provisions of the present Convention not applicable to it as an existing vessel; or
 - v) which substantially alters the energy efficiency of the vessel and includes any modifications that could cause the vessel to exceed the applicable required Energy Efficiency Design Index (EEDI) as set out in MARPOL Annex VI Reg.21.
- .3 A vessel delivered on or after 01 September 2019 means a vessel:
- i) for which the building contract is placed on or after 01 September 2015; or
 - ii) 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 01 March 2016; or
 - iii) the delivery of which is on or after 01 September 2019.
- 4.2 For the purposes of MARPOL Annex VI Chapter 4, the categories defined in MARPOL Annex VI Reg.: 2.2.5 **Bulk carrier**; 2.2.7 **Combination carrier**; 2.2.9 **Container ship**; 2.2.11 **Cruise passenger ship**; 2.2.14 **Gas carrier**; 2.2.15 **General cargo ship**; 2.2.16 **LNG carrier**; 2.2.20 **Passenger ship**; 2.2.22 **Refrigerated cargo carrier**; 2.2.26 **Ro-Ro cargo ship**; 2.2.27 **Ro-Ro cargo ship (vehicle carrier)**; 2.2.28 **Ro-Ro passenger ship**; 2.2.29 **Tanker**.

5. Exceptions and Exemptions (MARPOL VI Reg.3)

- 5.1 MARPOL Annex VI regulations do not apply to emissions necessary for securing the safety of the vessel, saving life at sea, or those resulting from accidents and damage suffered to the vessel or its equipment:
- .1 provided that all reasonable precautions have been taken after the occurrence of the damage or discovery of the emission for the purpose of preventing or minimizing the emission; and
 - .2 except if the Owner or the Master acted either with intent to cause damage, or recklessly and with knowledge that damage would probably result.
- 5.2 The requirements of MARPOL Annex VI Reg. 18 on fuel oil availability and quality shall not apply to the use of hydrocarbons that are produced and subsequently used on site as fuel and this exemption shall be annotated on the International Air Pollution Prevention Certificate (IAPPC).
- 5.3 The BMSR may exempt unmanned non-self-propelled (UNSP) barges from the survey and certification requirements of MARPOL Annex VI by means of an International Air Pollution Prevention Exemption Certificate for Unmanned Non-self-propelled (UNSP) Barges for a period not exceeding five years as per MEPC.1/Circ.892.

6. Equivalent (MARPOL VI Reg. 4)

- 6.1 Requests for equivalencies or alternative arrangements must be submitted to the BMSR at Ops@barbadosmarime.com. As per Bulletin 008, they must include a recommendation from the Recognised Organisation (RO) confirming that the alternative arrangement is at least as effective in terms of emissions reductions as required MARPOL Annex VI.
- 6.2 Upon satisfactory review of the application, the BMSR will notify the International Maritime Organization (IMO) of the acceptance of the equivalent/alternative compliance by making an entry in the IMO Global Integrated Shipping Information System (GISIS).

7. Surveys and Certification (MARPOL VI Reg. 5 to 9)

- 7.1 Barbadian vessels of 400 GT and above, engaged on international voyages, and every fixed and floating drilling rig or other platform shall be surveyed and certificated for compliance with the requirements of MARPOL Annex VI Reg. 5.1 and be issued with an IAPPC.
- 7.2 As per MARPOL Annex VI Reg. 13.1.1, each marine diesel engine with a power output over 130 kilowatt (kW) that is installed (or undergoes major conversion) on a vessel, irrespective of tonnage, must be surveyed and certified in accordance with the NTC 2008.
- 7.3 Barbadian vessels of 400 gross tonnage and above, to which MARPOL Annex VI Chapter 4 applies, shall undergo surveys in accordance with MARPOL Annex VI Reg. 5.1 and be issued with an International Energy Efficiency Certificate (IEEC).
- 7.4 Barbadian vessels which are not required to keep a Ship Energy Efficiency Management Plan (SEEMP) do not require an IEEC.
- 7.5 The ship type on the IEEC shall refer to the ship type in accordance with definitions specified in MARPOL Annex VI Reg. 2.2. which are indicated in Sec. 4.2 above.
- 7.6 If the vessel does not fall into the ship types defined in Sec. 4.2 above, in the IEEC the ship type shall be entered as "Ship other than ship types defined in in MARPOL Annex VI Reg. 2.2" and "the type of ship is exempt in accordance with MARPOL Annex VI Reg. 22.1/23.1/24.1/25.1" as applicable, shall be ticked in the IEEC relevant section.
- 7.7 If needed, the BMSR can issue a waiver letter as confirmation by this flag Administration of the ship type and to address Sec. 7.6 above.
- 7.8 The BMSR considers that the ship type stated on the IEEC should usually replicate the ship type designated at the stage of design and construction on which the Certificate of Class and Statutory Certificates of the vessel are based and with the ship type of the Barbados Certificate of Registry (COR).

- 7.9 In situations where, owing to operational necessity, an existing vessel may be required to change the ship type on the IEEC, the BMSR will consider such requests, where supported by the RO that issues the IAPPC of the vessel, provided that the ship type on the Certificate of Class, Statutory Certificates and COR of the vessel are amended accordingly.

The Owners of a vessel certificated to the ISM Code should be aware that where a change of ship type is requested, the vessel's Safety Management Certificate (SMC) and the Company Document of Compliance (DOC), including associated safety management documents and procedures, may require to be amended.

8. MARPOL VI – RO's Degree of Authorisation

8.1 The BMSR has authorised all Barbados ROs to:

- .1 Issue or endorse an IAPPC;
- .2 Issue or endorse an Engine International Air Pollution Prevention (EIAPP) certificate;
- .3 Verify VOC management plans (Sec. 12.2 below);
- .4 Carry-out Type Approval of shipboard incinerators (Sec. 13 below);
- .5 Approve SOX Emissions Compliance Plans and issue a SOx Emission Compliance Certificate to vessels which use an Exhaust Gas Cleaning Systems (EGCSs) as an approved equivalent;
- .6 Verify attained EEDI values calculated for each vessel (Sec. 14 below);
- .7 Verify attained EEXI values calculated for each vessel (Sec. 16 below);
- .8 Issue an IEEC after completion of the relevant surveys referred to in Sec. 7 above. The IEEC is to remain valid for the life of the vessel, except for the cases specified under MARPOL Annex VI Reg. 9.11 (vessel withdrawn from service, major conversion, or upon transfer of the vessel to the flag of another State).
- .9 Verify the Ship Energy Efficiency Management Plan (SEEMP) Part II (Ship Fuel Oil Consumption Data Collection Plan) and issue Confirmation of Compliance (Sec.0 below);
- .10 Verify Ship Fuel Oil Consumption Data Collection from each vessel operator, per vessel and issue an Annual Statement of Compliance (SoC) (Sec. 19 below);
- .11 Submit data to the IMO Ship Fuel Oil Consumption Database.

9. Ozone-Depleting Substances (MARPOL VI Reg. 12)

- 9.1 Deliberate emissions of ozone-depleting substances (ODS) are prohibited and all vessels with installations containing ODS must comply with MARPOL Annex VI Reg. 12, except for permanently sealed equipment where there are no refrigerant charging connections or potentially removable components that contain ODS.
- 9.2 The ODS Record Book is required for the vessel of 400 GT and above, and drill rigs and platforms regardless of tonnage, which have rechargeable systems containing ozone-depleting substances. The BMRS ODS Record Book can be ordered on [Shipboard Document Online Form](#).

10. Nitrogen Oxide (NO_x) Emissions (MARPOL VI Reg. 13)

- 10.1 It is prohibited to operate a marine diesel engine with a power output of more than 130 kW, and which is installed, or undergoes a major conversion on or after 01 January 2000, unless it complies with the applicable NO_x emission limits and requirements specified in MARPOL Annex VI Reg. 13, which applies to any vessels (including yachts and fishing vessels) irrespective of tonnage.
- 10.2 Marine diesel engines installed on a vessel must comply, based on the date of vessel construction, with the NO_x Tier III emission standards when the vessel is operating in an Emission Control Area (ECA) as specified in MARPOL Annex VI Reg. 13.5.1.2.
- 10.3 Emergency diesel engines and engines installed in lifeboats, devices, or equipment intended to be used solely for emergencies are exempted from the MARPOL Annex VI Reg. 13 requirements.

- 10.4 Emissions from fixed or floating platforms and drilling rig engines that are solely dedicated to the exploration, exploitation and associated offshore processing of seabed mineral resources are exempted from the regulations regarding NOx controls. However, any emissions from engines that jointly supply power to exploration and processing machinery and also the platform domestic load are NOT exempted.
- 10.5 Each engine on board a Barbados vessel subject to MARPOL Annex VI is required to have an associated Engine Technical File. The Technical file shall remain on board the vessel for as long as the engine remains on board and shall be available for inspection by duly authorised officers.
- 10.6 The Technical File shall include an on-board NOx verification procedure, the parent engine's emission test report and the Engine International Air Pollution Prevention Certificate (EIAPPC).
- 10.7 Boilers and gas turbines are not covered under the NOx controls regulations.

11. Sulphur Oxides (SO_x) and particulate matter (MARPOL VI Reg. 14)

- 11.1 The carriage of fuel oil for use on board the vessel with a sulphur content exceeding 0.50% m/m is prohibited under MARPOL Annex VI Reg. 14.1. This prohibition does not apply to non-compliant fuel oil carried for use onboard a vessel with an approved EGCS installed as an alternative means of compliance and to fuel oil carried on board as a cargo.
- 11.2 The global sulphur limit is a mandatory requirement and is applicable to all vessels on all voyages, covering all fuel carried on board for consumption – this includes fuel oil used in emergency systems (emergency generator, lifeboats, rescue boat, etc.), and concerns about the safety of the vessel and machinery do not exempt the vessel from the requirement to bunker and/or consume compliant fuel oil.
- 11.3 In ports where the discharge of wash water from open loop EGCS (scrubbers) is not permitted, vessels fitted with open loop/hybrid EGCS may be expected to consume compliant fuel oil or to switch to closed loop mode. Documents related to changeover procedure and records should be kept on board.
- 11.4 IMO Resolution MEPC.340(77) requires the EGCS Technical Manual (ETM) and Onboard Monitoring Manual (OMM) to be approved by the RO on behalf of Barbados.
- 11.5 While a vessel is operating within an Sulphur Emission Control Area (SECA) as defined under MARPOL Annex VI Reg. 14.3, the sulphur content of fuel oil used on board that vessel shall not exceed 0.10% m/m as per MARPOL Annex VI Reg. 14.4.
- 11.6 Vessels using separate fuel oils when operating within a SECA must carry a written fuel oil changeover procedure, developed specifically for the vessel. A record of the changeover operation shall be recorded in the MARPOL Annex VI Record Book.
- 11.7 The BMSR MARPOL Annex VI Record Book can be ordered on [Shipboard Document Online Form](#).

12. Volatile Organic Compounds (MARPOL VI Reg. 15)

- 12.1 Tankers subject to vapour emissions control must be fitted with a vapour collection system approved by an RO on behalf of Barbados, within three years after a port/terminal has notified the IMO of its regulation of tanker VOC emissions. See [GISIS module](#) for ports or terminals where VOCs are controlled.
- 12.2 The VOC management plan, required for all tankers carrying crude oil, must be approved by an RO on behalf of Barbados.
- 12.3 Gas carriers must comply with the requirements of this section only if their loading and containment systems allow safe retention of non-methane VOCs on board, or their safe return ashore.

13. Shipboard Incineration (MARPOL VI Reg. 16)

- 13.1 All vessels, irrespective of tonnage, must comply with the regulations on shipboard incineration under MARPOL Annex VI Reg. 16. Special rules on incineration under domestic law may apply in some ports and may exist in some special areas. Operation of shipboard incinerators may require permission from individual coastal or port authorities concerned.

- 13.2 Incinerators installed in accordance with the requirements of MARPOL Annex VI Reg. 16 shall be provided with a manufacturer's operating manual and personnel responsible for the operation of an incinerator shall be trained to implement the guidance provided in the manufacturer's operating manual.
- 13.3 An incinerator on a vessel constructed on or after 01 January 2000, or installed on or after 01 January 2000 must be approved by an RO on behalf of Barbados, taking into account the standard specification for shipboard incinerators as per MARPOL Annex VI Reg. 16.3 and 16.6.1.

14. Fuel Oil Quality - BDN and FONAR (MARPOL VI Reg. 18)

- 14.1 For every vessel of 400 GT and above, details of fuel delivered for combustion purposes must be documented by means of a Bunker Delivery Note (BDN) in the format specified under Appendix V of MARPOL Annex VI.
- 14.2 BDNs shall be kept on board for at least 3 years after the delivery of the fuel oil and shall be accompanied by a representative sample ("MARPOL delivered sample") which is to be sealed and signed by the Master or officer in charge of the bunker operations and retained under the vessel's control until the fuel oil is substantially consumed, but in any case, not less than 12 months from the time of delivery. Representative samples of fuel already consumed may be retained in an appropriate shore side facility under control of the Company.
- 14.3 Coastal and port State authorities of a Party to MARPOL Annex VI, as appropriate, may utilise the sampling point(s) which is(are) fitted or designated for the purpose of taking representative sample(s) of the fuel oil being used on board as outlined in IMO Circulars MEPC.1/Circ.864/Rev.1, MEPC.1/Circ.889 and Resolution MEPC.324(75). The competent authority shall take fuel oil samples as expeditiously as possible without causing the vessel undue delays, and the sample must be sealed by the representative of the competent authority in the presence of the vessel's representative and the vessel shall retain a duplicate sample.
- 14.4 For every vessel of 400 GT and above on scheduled services with frequent and regular port calls which would render compliance with the requirements of this section impracticable, an alternative documentation and sampling storage plan may be approved by the BMSR, after consideration of the circumstances involved and consultation with the affected States concerned.
- 14.5 Where, despite all reasonable efforts, compliant fuel oil is not received at the scheduled port of call, and no feasible alternative exists, the vessel will be required to prepare and submit a Fuel Oil Non-Availability Report (FONAR) as per Sec. 5 of Resolution MEPC.320(74), which shall be submitted to both the BMSR and the Coastal State authorities of the port(s) of destination.
- 14.6 When a vessel has presented evidence of the non-availability of compliant fuel oil, the BMSR will subsequently notify the IMO through "MARPOL Annex VI" GISIS module. The following information shall be provided to the BMSR:
- .1 a record of actions taken to attempt to achieve compliance;
 - .2 copies of Bunker Delivery Note(s);
 - .3 post-bunkering laboratory analysis of drip samples taken to determine the percent concentration of sulphur found within the stemmed fuel oil; and
 - .4 evidence that the vessel attempted to purchase compliant fuel oil 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 fuel oil and that despite best efforts to obtain compliant fuel oil, no such fuel oil was made available for purchase.
- 14.7 Providing the information above does not indemnify the vessel from Port State Control (PSC) action in the event compliant fuel oil could not be obtained. The relevant authorities of a Party to MARPOL Annex VI will consider all relevant circumstances in addition to the evidence provided when determining the appropriate action to take based on the guidance for Port State Control on how to address the provision of non-compliant fuel oil, as per IMO Circular MEPC.1/Circ.881.
- 14.8 Follow-up actions may be considered when arranging the supply of compliant fuel oil following bunkering of non-compliant fuel oil under a FONAR:
- .1 De-bunker any remaining non-compliant fuel oil at the first port where compliant fuel is available; and

- .2 Specific preparations to ensure bunker tanks and fuel transfer, treatment and preparation systems are sufficiently cleaned and are suitable for compliant fuel oil without the risk of contamination by residues of non-compliant fuel oil. Such actions may include tank cleaning, system pipelines and equipment flushing or mechanical cleaning.

15. Attained EEDI and Required EEDI (MARPOL VI Reg. 22 and 24)

- 15.1 Energy Efficiency Design Index (EEDI) represents the equivalent amount of carbon dioxide that a vessel as a whole emits, in relation to the amount of cargo carried per mile sailed.
- 15.2 The attained EEDI is defined under MARPOL Annex VI Reg. 2.2.3 as the EEDI value achieved by an individual vessel in accordance with MARPOL Annex VI Reg. 22. The attained EEDI should be lower than the required EEDI prescribed in MARPOL Annex VI Reg. 24, which is the maximum value of attained EEDI allowed for the specific vessel type and size.
- 15.3 The attained EEDI and required EEDI are applicable for a “new ship” as defined in Sec. 4.1.1 above or an existing one which has undergone a major conversion so extensive that it is regarded as newly constructed, which falls into one or more of the categories defined in Sec. 4.2 above.
- 15.4 The attained EEDI shall be calculated taking into account Resolution MEPC.364(79) and verified by a Barbados RO. The attained EEDI shall be specific to each vessel and shall indicate the estimated performance of the vessel in terms of energy efficiency and be accompanied by the EEDI Technical File that contains the information necessary for the calculation of the attained EEDI and shows the process of calculation. When a vessel may be identified as falling under more than one category listed above, the more stringent criteria in calculations shall apply.
- 15.5 Starting from 01 April 2022 for all vessels to which requirements of MARPOL Annex VI Reg. 22 and 24 apply, the attained EEDI and required EEDI shall be reported to the IMO as follows:
 - .1 For vessels constructed on or after 1 April 2022 within 7 months from the date of the IEEC Initial Survey; or
 - .2 for vessels constructed prior to 1 April 2022 by 1 November 2022.

16. Attained EEXI and Required EEXI (MARPOL VI Reg. 23 and 25)

- 16.1 Energy Efficiency Existing Ship Index (EEXI) is a measure of a vessel’s energy efficiency, expressed in grams of carbon dioxide per amount of cargo carried per mile sailed.
- 16.2 The attained EEXI shall be calculated as per MARPOL Annex VI Reg. 23, taking into account Resolution MEPC.333(76) and verified by a Barbados RO. The Required EEXI is the maximum value of attained EEXI allowed for the specific vessel type and size and is calculated as per MARPOL Annex VI Reg. 25.
- 16.3 The attained EEXI and required EEXI are applicable for each existing vessel and each vessel which has undergone a conversion, which fall into one or more of the categories defined in Sec. 4.2 above.
- 16.4 Where a vessel may be identified as falling under more than one category listed above, the more stringent criteria in calculations shall apply. The process of calculation and the necessary information to produce the EEXI calculation shall be addressed in the vessel specific EEXI Technical File.
- 16.5 Notwithstanding Sec. 16.2, for each vessel to which MARPOL Annex VI Reg. 22 applies, the attained EEDI may be taken as the attained EEXI if the value of the attained EEDI is equal to or less than that of the required EEXI as required by MARPOL Annex VI Reg. 25. In this case, the attained EEXI shall be verified based on the EEDI Technical File and the provisions contained within the EEDI Technical File may be used in place of an EEXI Technical File.
- 16.6 The EEXI Technical File shall be reviewed and accepted by the Verifier. The Verifier may issue a statement affirming the completion of an EEXI Technical File review; however, such a statement does not form part of the survey requirements of MARPOL Annex VI Reg. 22.

17. Shaft / Engine Power Limitation Systems and use of Reserve of Power

17.1 As per Resolution MEPC.335(76) the following definitions are to be used:

- .1 *Shaft power* means the mechanical power transmitted by the propeller shaft to the propeller hub. It is the product of the shaft torque and the shaft rotational speed. In case of multiple propeller shafts, the shaft power means the sum of the power transmitted to all propeller shafts.
- .2 *Engine power* means the mechanical power transmitted from the engine to the propeller shaft. In case of multiple engines, the engine power means the sum of the power transmitted from the engines to the propeller shafts.
- .3 *Overridable Shaft Power Limitation (SHaPoLi) system* means a verified and approved system for the limitation of the maximum shaft power by technical means that can only be overridden by the vessel's Master or the officer in charge of navigational watch (OICNW) for the purpose of securing the safety of a vessel or saving life at sea.
- .4 *Overridable Engine Power Limitation (EPL) system* means a verified and approved system for the limitation of the maximum engine power by technical means that can only be overridden by the vessel's Master or OICNW for the purpose of securing the safety of a ship or saving life at sea.
- .5 *Power reserve* means shaft/engine power above the limited power which cannot be used in normal operation unless in the case when SHaPoLi/EPL is unlimited for the purpose of securing the vessel safety.

17.2 Any SHaPoLi and EPL system installation on board of Barbadian vessels shall be approved and verified by a Barbadian RO for compliance with Resolution MEPC.335(76).

17.3 The SHaPoLi/EPL system shall be accompanied by the Onboard Management Manual (OMM) for SHaPoLi/EPL, which shall be verified by a Barbadian RO after a survey verifying the vessel's attained EEXI and shall be permanently on board the vessel for inspection.

17.4 The use of a power reserve is only allowed for the purpose of securing the safety of a vessel or saving life at sea, consistent with MARPOL Annex VI Reg. 3.1 such as: operating in adverse weather and ice-infested waters, participation in search and rescue operations, avoidance of pirates and engine maintenance.

17.5 As per Resolution MEPC.335(76) the use of power reserve (override) shall be allowed only for the following cases:

- .1 operating in adverse weather;
- .2 operating in ice-infested waters;
- .3 participation in search and rescue operations;
- .4 avoidance of pirates;
- .5 engine maintenance;
- .6 description of other reasons consistent with MARPOL Annex VI Reg. 3.1.

17.6 The use of power reserve for engine maintenance as Sec. 17.5.5 above, depends on the engine type and auxiliary systems. Hence, if the maintenance, as per manufacturer's specifications, cannot be done with normal power, the use of a power reserve can be considered for engine maintenance for any applicable regular and irregular maintenance by the RO when approving the OMM.

17.7 The RO, in this case, approves the use of a power reserve for regular maintenance only after assessment of the manufacturer's specifications as per above. In this case, the authority for this should be clearly set out in the OMM and/or the SMS manual, as appropriate.

17.8 Any use of a power reserve should be recorded in the record page of the OMM for SHaPoLi/EPL, signed by the Master and should be kept on board and in the format as per appendix of Resolution MEPC.375(80).

17.9 Where an EPL/SHaPoLi override is activated but the power reserve is not subsequently used, this event should be recorded in the bridge and engine-room logbooks. The engine-room logbook should record power used during the period when the override was activated. The EPL/SHaPoLi should be reset as soon as possible, and details of the reset should also be recorded in the bridge and engine-room logbooks.

- 17.10 In case of having used a power reserve, the vessel shall without delay (within 24 hours) notify the RO responsible for issuing the relevant certificate and the competent authority of the relevant port of destination with the information recorded as per Sec. 17.8 above. The notification need not be done to the BMSR.
- 17.11 On an annual basis by 30 June every year, the RO responsible for issuing the relevant certificate shall report to the IMO Secretariat uses of a power reserve over a 12-month period from 1 January to 31 December for the preceding calendar year with the information recorded in accordance with Sec. 17.8 above. As of the date of issue of this Bulletin, the IMO is yet to develop guidance of the year reporting and the IMO GISIS Module "MARPOL Annex VI" does not allow yet notification required by MARPOL Annex VI Reg. 23 and 25.
- 17.12 Once the risks have been mitigated, the vessel shall be operated below the certified level of engine power under the SHaPoLi/EPL.
- 17.13 The SHaPoLi/EPL system should be reactivated or replaced by the crew immediately after the risks have been prevented and the ship can be safely operated with the limited shaft/engine power. The reactivation or replacement of the SHaPoLi/EPL system should be confirmed (e.g. validation of mechanical sealing) with supporting evidence (e.g. engine power log, photo taken at the occasion of resetting the mechanical sealing) by the RO at the earliest opportunity.
- 17.14 The type of evidence and the timing of submission shall be stated in the OMM and SMS manual. The submission is to be at the earliest opportunity, hence as soon as the use of power reserve and within 24 hours.
- 17.15 Supporting evidence includes engine power log, photo taken at the occasion of resetting the mechanical sealing and these can be verified remotely by the RO. The BMSR does not request an additional survey for reactivation of the SHaPoLi/EPL after engine maintenance.
- 17.16 The RO shall carry out an additional survey in case of replacement of the SHaPoLi/EPL systems and any alteration in the systems.

18. Ship Energy Efficiency Management Plan (SEEMP) (MARPOL VI Reg. 26)

- 18.1 Every vessel of 400 GT and above shall keep on board a ship specific Ship Energy Efficiency Management Plan (SEEMP). This may form part of the ship's Safety Management System (SMS). The SEEMP shall be developed and reviewed, taking into account Resolution MEPC.346(78).
- 18.2 The SEEMP shall be provided on board before issuance of the IEEC.
- 18.3 There are three parts to a SEEMP:
- .1 SEEMP Part I. The purpose of this part is to provide an approach to monitor vessel and fleet efficiency performance over time and describe ways to improve the vessel's energy efficiency performance and carbon intensity. Part I of the SEEMP applies to any vessel of 400 GT and above;
 - .2 SEEMP Part II. The purpose of this part is to provide a description of the methodologies that should be used to collect the Ship Fuel Oil Consumption Data required pursuant to MARPOL Annex VI Reg. 27 and the processes that the vessel should use to report the data to the Barbados RO. Part II of the SEEMP applies to any vessel of 5,000 GT and above.
 - .3 SEEMP Part III. The purpose of this part is to provide:
 - i) A description of the methodology that should be used to calculate the vessel's attained annual operational Carbon Intensity Indicator (CII) required by MARPOL Annex VI Reg. 28 (Sec. 20 below);
 - ii) The processes that should be used to report this value to the Barbados RO;
 - iii) The required annual operational CII for the next three years;
 - iv) An implementation plan documenting how the required annual operational CII should be achieved during the next three years;
 - v) A procedure for self-evaluation and improvement; and
 - vi) For vessels rated as D for three consecutive years or rated as E, a plan of corrective actions to achieve the required annual operational CII.
- 18.4 Part III of the SEEMP applies to any vessel of 5,000 GT and above which falls into one or more of the categories defined 4.2 above.

- 18.5 The SEEMP Part I does not require verification or approval by the Administration/RO. This may form part of the vessel's SMS.
- 18.6 The SEEMP Part II should be verified by the nominated Reporting Organisation/Verifier, prior to commencement of Ship Fuel Oil Consumption Data reporting. On successful verification of the amended SEEMP, the Reporting Organisation/Verifier is to issue a Confirmation of Compliance as per MEPC.1-Circ.876 to the vessel, in accordance with MARPOL Annex VI Reg.5.4.5.
- 18.7 Where there is a change of nominated Reporting Organisation/Verifier, the new Reporting Organisation/Verifier shall obtain the SEEMP Part II verified by the previous Recognised Organisation/Verifier and the related Confirmation of Compliance and take those to their files as a basis for later verifications.
- 18.8 The SEEMP Parts I & II & III and Confirmation of Compliance shall be kept on board.
- 18.9 The SEEMP Part III amendments shall be verified and confirmed acceptable to the Reporting Organisation/Verifier.

19. Collection and Reporting of Ship Fuel Oil Consumption Data (MARPOL VI Reg. 27)

- 19.1 The Company shall ensure that fuel consumption data and the attained annual operational CII index for the previous year for vessels to which MARPOL Annex VI Reg. 27 and 28 apply is submitted to the Reporting Organisation/Verifier by not later than 31 March. The Statement of Compliance required by MARPOL Annex VI Reg. 6.4 is to be issued by the Reporting Organisation/Verifier by 31 May each year.
- 19.2 Verified fuel consumption and attained annual operational CII index data is to be uploaded to the IMO Global Integrated Shipping Information System (GISIS) by the Reporting Organisation/Verifier within 1 month after issuing the Statement of Compliance but not later than 30 June each year.
- 19.3 When preparing the annual fuel consumption reports for their fleet, the Company should be aware that submission is also required for a part of a year if a vessel has left or been accepted to their management, joined, or left the Barbados flag, or has been recycled before 31 December. The reporting of the fuel consumption data is required on the day of completion of the transfer from one flag to another or of the change from one Company to another, or as close thereto as practical.
- 19.4 Notwithstanding 19.3, where a vessel changes flag to the Barbados at any time after 01 January the attained annual operational CII index shall be reported to the Reporting Organisation/Verifier for the entire 12 months period by 31 March the next year. As of the date of issue of this Bulletin, the IMO is yet to develop the detailed guidance on the end of year reporting where only partial fuel consumption information is available.
- 19.5 Recognising that on occasions or review of aggregated and verified data cannot be completed due to missing data from previous shipowners and flag States, the BMSR exercises a pragmatic approach in allowing the Reporting Organisation/Verifier additional time to complete the submission and issue a Statement of Compliance based on partial data, with the following conditions:
- .1 The SOC shall clearly state that the calculation is based on partial data;
 - .2 The RO shall records emails sent from the new shipowners to previous shipowners, flag State, and RO/Verifier for request of the data under their responsibility.
- 19.6 A request for a permit, as per Bulletin 008, for a conditionally issued short term IEEC should be submitted via the RO or Company for every vessel where any of the limit date(s) in Sec. 19.1 cannot be met.
- 19.7 In accordance with Appendix IX of MARPOL Annex VI, the following information is to be included in the annual cumulative fuel consumption data report:
- .1 Identity of the vessel: IMO number, ship type, gross tonnage, net tonnage, deadweight, rated power of each main and/or auxiliary reciprocating internal combustion engine over 130 kW, Attained EEDI (where applicable), Ice Class;
 - .2 Every type of fuel oil consumed on board for any purpose (engines, boilers, incinerator, inert gas generators, heaters etc.), in metric tonnes. This requirement also applies to ships consuming boil-off gas (BOG) for the purpose of propulsion or shipboard operational needs (the quantity of consumed BOG should be reported in metric tonnes in reference to the original quantity of liquified gas);
 - .3 distance travelled over ground;

- .4 hours underway;
- .5 information on the method used to collect fuel consumption data as required by MARPOL Annex VI Reg. 22A.
- 19.8 Reporting of direct CO₂ emission measurements is not mandatory. This method may however be utilised concurrently where the necessary equipment is installed on board to supplement the fuel consumption data report.
- 19.9 When the Reporting Organisation/Verifier has received fuel consumption data from a ship and verified that it has been collected and reported correctly per Resolution MEPC.348(78), a Statement of Compliance shall be issued to the vessel confirming the submission of the data required for the period. The format of the Statement of Compliance can be found in Appendix X of MARPOL Annex VI.
- 19.10 Each Statement of Compliance will remain valid for the duration of the calendar year when it was issued and for the first five months of the next calendar year.
- 19.11 Expired Statements of Compliance are not required to be retained beyond their expiration date, once a new statement has been issued and delivered on board.
- 19.12 In situations where a vessel is not in a position to obtain a new Statement of Compliance following the end of a calendar year due to lay-up, conversion of period of inactivity, the last issued Statement of Compliance shall be retained on board for inspection.

20. Operational Carbon Intensity (MARPOL VI Reg. 28)

- 20.1 Starting from 01 January 2024, each vessel of 5,000 GT and above which falls into one or more of the categories specified in Sec. 4.2 above shall calculate the attained annual operational Carbon Intensity Indicator (CII) over a 12-month period from 1 January to 31 December for the preceding calendar year, using the data collected in accordance with MARPOL Annex VI Reg. 27.
- 20.2 The attained annual operational CII for the preceding year shall be reported by the Reporting Organisation/Verifier by 01 April each year.
- 20.3 Notwithstanding the above, in the event of a change of flag of a ship completed after 1 January 2023, the vessel shall, after the end of the calendar year in which the transfer takes place, calculate and report the attained annual operational CII for the full 12-month period from 1 January to 31 December in the calendar year during which the transfer took place, for verification by the RO.
- 20.4 The attained annual operational CII shall be verified by the Reporting Organisation/Verifier against the required annual operational CII to determine an operational carbon intensity rating of A, B, C, D or E, indicating the ship's preceding year performance level, as outlined in MARPOL Annex VI Reg. 28.6.
- 20.5 A ship rated as D for three consecutive years, or when rated as E, shall develop a plan of corrective actions to achieve the required annual operational CII.
- 20.6 The SEEMP shall be reviewed to include the above plan of corrective actions accordingly. The revised SEEMP shall be submitted to the Reporting Organisation/Verifier for verification, not later than 1 month after reporting the attained annual operational CII. Implementation of corrective actions shall commence immediately following the verification by the Reporting Organisation/Verifier.

21. EU/UK MRV Reporting

- 21.1 The EU requires the monitoring, reporting and verification (MRV) of carbon dioxide emissions from maritime transport as applicable, for vessels above 5,000 GT on EU related voyages and to be in compliance with Regulation (EU) 2015/757.
- 21.2 As a result of the United Kingdom leaving the EU, the EU MRV no longer applies to the UK. However, the UK has adopted with SI 2018/1388 UK MRV regulations, based on the EU MRV, which are applicable for vessels above 5,000 GT trading in or out of any UK ports and reporting shall be done as per UK Marine Information Notice MIN 669 (M+F).
- 21.3 The EU and UK MRV are in addition to the provisions of MARPOL Annex VI.

- 21.4 It is anticipated that the EU/UK MRV and MARPOL Annex VI fuel consumption data submission requirements will eventually be aligned to reduce administrative burden, as some vessels will need to report the same data twice. However, so far there are no firm indications of the timescale for alignment of the EU/UK MRV and MARPOL Annex VI requirements.
- 21.5 Fuel consumption data for voyages between ports in the UK, whilst at berth in any UK ports, between ports in the UK and non-EEA ports and vice-versa shall be included in UK MRV reporting.
- 21.6 To avoid duplication, fuel consumption data covering voyages between the UK and EEA ports and vice versa shall not be reportable under the UK MRV regulations and shall continue to be submitted as part of EU MRV data.
- 21.7 Where a Barbados RO acts as a Reporting Organisation/Verifier (DCS) and has been accredited as an MRV verifier, the BMSR has no objection to fuel consumption data and MRV reporting being combined, provided that the combined reports provide all of the information required by MARPOL Annex VI Reg. 22A.
- 21.8 A Document of Compliance covering the EU/UK MRV fuel consumption data submission shall be provided on board every applicable vessel.



Revision No	Description Of Revision
1.0	First Issue -superseded Information Bulletins 298/281/302/316/345
1.1	Amended reference 1.v and added references 1.w and 1.x; Amended sec. 8.10 and 8.11 headings; added whole new section 17.
1.2	Sec. 1.b) amended Sec. 17.11 added new text for reporting to the IMO Secretariat. Sec. 19.4 Amended reference to 18.3 with 19.3 and replaced wording "Notice" with "Bulletin". Sec. 19.5 amended all the section. Sec 19.7.2 footnote 1 removed and added as part of the section.

