



## MEPC 77 BRIEF

The IMO Marine Environmental Protection Committee (MEPC) held its 77th session from November 22 to 26, 2021. This Brief provides an overview of the more significant issues progressed at this virtual session.

### KEY DEVELOPMENTS

- IMO GHG Strategy – 2050 Level of Ambition
- Reduction of Black Carbon Emissions in the Arctic
- 2021 Guidelines for Exhaust Gas Cleaning Systems
- BWM Convention – Unified Interpretations
- IMO Strategy to Address Marine Plastic Litter

### ABS RESOURCES

- ABS Global Sustainability Center ([link](#))
- ABS EEXI Services ([link](#))
- ABS Environmental Monitor™ ([link](#))
- ABS Guide for Sustainability Notations ([link](#))
- ABS Regulatory News ([link](#))
- ABS Rules and Guides ([link](#))

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## IMO STRATEGY ON GHG EMISSIONS

### 2050 Level of Ambition and Revision of the Initial IMO GHG Strategy

A proposal was received to update the ambition of the IMO's Initial GHG Strategy to zero GHG emissions by 2050 instead of the current 50% reduction of GHG levels from 2008 in 2050, which would have aligned with the Paris Agreement and the Glasgow Climate Pact reached at COP26. While this change was ultimately not supported by the Committee at this session, there was agreement on the need to review and update the IMO GHG Strategy including its targets, impact assessments and a review of fuel availabilities. It was also agreed that the next update of the Strategy should shift its focus to concrete proposals, and the Committee invited submissions to MEPC 78, for the finalization of an updated Strategy at MEPC 80 (Spring 2023).

Also considered were submissions to Phase I of the work plan which involves the identification of all candidate proposals for mid-term GHG reduction measures, which at this time may be regarded as a 'basket of measures' including a combination of technical, operational and market-based measures. The premise of this phase is that no proposals would be excluded, and then the assessment and selection of final measures would be made during Committee and intersessional sessions of Phase II of the work plan scheduled for the spring of 2022 to spring of 2023.

### Proposals for an International Maritime Research Board (IMRB)

As a mid-term measure under the IMO Initial GHG Strategy, the Committee considered proposals and comments regarding the establishment of an International Maritime Research Board (IMRB), for the purpose of advancing research and development of GHG reduction technologies and ensuring that all States may benefit from these technologies. The Committee discussed in detail the obstacles for establishing an IMRB, which included issues of funding and information sharing. This matter will be addressed further at the Intersessional Working Group on GHG Reduction (ISWG-GHG) along with organization of other mid- and long-term measures for GHG reduction.

### Cross-Reference Tables Between 2021 Revised MARPOL Annex VI and the Previous MARPOL Annex VI

To facilitate the smooth implementation of the 2021 Revised MARPOL Annex VI (Resolution MEPC.328(76), adopted at the previous session), the Committee approved MEPC.1/Circular 897 which provides cross-referencing tables between the 2021 Revised MARPOL Annex VI and the previous MARPOL Annex VI. The tables focus on Regulation 2 (Definitions) as well as regulations within Chapters 4 (EEDI, EEXI and Carbon Intensity) and 5 (Verification/Audit of MARPOL VI Parties



compliance) of MARPOL Annex VI. The circular aims to facilitate smooth implementation of the 2021 Revised MARPOL Annex VI when it enters into force on 1 November 2022.

### **Protecting the Arctic from Black Carbon Emissions from Ships**

Noting the IMO's ongoing work to establish appropriate control measures to reduce the impact on the Arctic of Black Carbon emissions from international shipping, the Committee adopted Resolution MEPC.342(77) which:

- 1) Notes that Black Carbon is a short-lived contributor to climate warming, and as considered under the Fourth IMO GHG Study that a switch to distillate fuel reduces an engine's Black Carbon emissions; and
- 2) Encourages Member States and ship operators to voluntarily use distillate or other cleaner alternative fuels or methods of propulsion that are safe for ships and could contribute to the reduction of Black Carbon emissions from ships when operating in or near the Arctic.

## **AIR POLLUTION AND ENERGY EFFICIENCY**

### **2021 Guidelines for Exhaust Gas Cleaning Systems**

After postponement from previous sessions, the Committee adopted Resolution MEPC.340(77), the *2021 Guidelines for Exhaust Gas Cleaning Systems*, which will supersede the 2015 Guidelines. Updates to the Guidelines clarify a number of parameters to provide consistent terminology and enhance the uniform application of these EGCS standards, taking experience gathered from operation of such systems into consideration. The updated guidelines will be applicable to:

- 1) EGCSs installed on ships the keels of which are laid or which are at a similar stage of construction on or after 1 June 2022; or
- 2) EGCSs installed on ships the keels of which are laid or which are at a similar stage of construction before 1 June 2022, which have a contractual delivery date of EGCS to the ship on or after 1 June 2022 or, in the absence of a contractual delivery date, the actual delivery of the EGCS to the ship on or after 1 June 2022; or
- 3) amendments to the EGCS Technical Manual "Scheme A" or "Scheme B" which affect the performance of the EGCS with respect to emissions to air and/or water that are undertaken on or after 1 June 2022

Systems approved under the 2015 EGCS Guidelines (MEPC.259(68)) and installed prior to 1 June 2022 will not require reapproval.

### **Revised Guidance on Indication of Ongoing EGCS Compliance in the Case of the Failure of a Single Monitoring Instrument**

The Committee approved a revision to MEPC.1/Circular 883 which provides guidance on necessary steps to take in the event of EGCS system malfunctions or sensor failures. Revisions were made to clarify the application of these guidelines under the latest version of the EGCS Guidelines (i.e., reference to "2015 EGCS Guidelines" were revised to "the EGCS Guidelines"). Additionally, guidance was added regarding the exceptional need to use non-compliant fuel oil in the event of EGCS failure in order to safely complete a ship's intended voyage, which is to be done in consultation with the relevant Flag and Coastal State authorities.

### **Discharge of Discharge Water from EGCS into the Aquatic Environment**

In an effort to bring consistency to the manner in which various Member States have considered the discharge water of Exhaust Gas Cleaning Systems, the Committee approved an updated workplan scope pertaining to the discharge



of water from EGCS into the aquatic environment. Retitled as "*Evaluation and harmonization of rules and guidance on the discharge of discharge water from EGCS into the aquatic environment, including conditions and areas*", this scope of work includes:

- 1) Development of guidelines for performing a risk assessment for the evaluation of possible harmful effects of the discharge water from EGCS;
- 2) Development of guidelines for performing an impact assessment of possible harmful effects of the discharge water from EGCS;
- 3) Development of guidance regarding the delivery of EGCS residues to port reception facilities;
- 4) An assessment of current EGCS technology and current local/regional restrictions on discharge water from EGCS; and
- 5) Establishing a database of substances identified in EGCS discharge water.

The target completion date for this work will be in 2022, and the PPR 9 Sub-Committee meeting has been tasked with completion of this work.

### **2021 Guidance on Treatment of Innovative Energy Efficiency Technologies for Calculation and Verification of the Attained EEDI and EEXI**

The Committee approved MEPC.1/Circular 896 providing updated guidance to manufacturers, shipbuilders, shipowners and other verifying parties relating to the application of EEDI and EEXI methodologies to innovative energy efficiency technologies. The circular provides a method of categorization for different energy efficiency technologies, and provides specific guidance on the following technologies:

- 1) Air lubrication systems;
- 2) Wind-assisted propulsion systems;
- 3) Waste heat recovery systems for generation of electricity; and
- 4) Photovoltaic power generation systems

This circular replaces MEPC.1/Circular 815.

## **BALLAST WATER AND ANTI-FOULING SYSTEMS**

### **Unified Interpretations of BWM Convention Regulations E-1.1.1 and E-1.1.5**

The Committee was presented with a proposed unified interpretation related to the commissioning test associated with the installation of a ballast water management system onboard a vessel. It was noted that regulations E-1.1.1 (Initial Survey) and E-1.1.5 (Additional Survey) do not provide the exact timing for the mandatory implementation of commissioning testing of individual BWMS installed onboard ships. Clarification was requested to confirm that:

- 1) the timing for mandatory implementation of the commissioning testing in accordance with regulations E-1.1.1 and E-1.1.5 of the BWM Convention (as amended by resolution MEPC.325(75)) should be based on the actual "completion date" of the applicable surveys following the installation of BWMS on board new and existing ships; and
- 2) the commissioning test of BWMS should be regarded as mandatory for relevant surveys completed after 1 June 2022, and the testing remains optional or at the discretion of the Administration for relevant surveys completed before 1 June 2022.

In this regard, the Committee agreed on both aspects, and approved BWM.2/Circular 76 detailing this interpretation.

### **Application of the BWM Convention to Ships Operating at Ports with Challenging Water Quality**

In support of the consistent implementation of the BWM Convention, the Committee discussed proposals for guidance to address situations in which the water quality in port is not conducive to successful ballast water



treatment, due to system design limitations of a given ballast water management system. It has been acknowledged that local waters in a port may present certain water qualities such as: as high level of turbidity, high level of total suspended solids, or low salinity, which have been identified as exceeding the operational limitation of a ship's approved ballast water management system.

However, certain complexities of this matter were recognized, including how this new guidance would correlate with existing guidance on contingency measures for BWMS malfunctions (BWM.2/Circ.62). The Committee was not able to finalize guidance at this session, and invited further submittals to MEPC 78 to progress this discussion.

### **Unified Interpretation of BWM Convention Regulation B-3.10**

The Committee was presented with a proposed unified interpretation from IACS related to determination of the implementation date of the D-2 biological standard for ballast water treatment based on the IOPP Certificate renewal survey. It was identified that there are vessels which are constructed (i.e. keel laid) before 8 September 2017 that may not have the MARPOL Annex I initial survey until after 8 September 2019, and therefore would not have the IOPP Certificate renewal survey until after 8 September 2024. Clarification was requested from the Committee to confirm that the IOPP Certificate renewal survey which activates D-2 compliance may take place after 8 September 2024, with the observation that some ships have instead been assigned a fixed deadline for D-2 compliance of 8 September 2024. In this regard, the Committee deemed it necessary for this interpretation to be considered by the PPR 9 Sub-Committee meeting for recommendation before acceptance.

### **BWM System Approvals**

*Basic Approval* was granted by the Committee for RADClean® BWMS, submitted by the Islamic Republic of Iran. RADClean treats ballast water by filtration and electrochlorination during uptake and neutralization with sodium thiosulfate prior to discharge.

*Final Approval* was granted by the Committee for JFE BallastAce® making use of NEO-CHLOR MARINE®, submitted by Japan. JFE BallastAce treats ballast water by filtration and disinfection with NEO-CHLOR MARINE, followed by neutralization during discharge using sodium sulfite.

*Final Approval* was granted by the Committee for HiBallast NF®, submitted by the Republic of Korea. HiBallast NF treats ballast water by electrochlorination during uptake and neutralization with sodium thiosulfate prior to discharge.

*Final Approval* was not granted by the Committee for FlowSafe® Ballast Water Management System that uses a combination of two methods for treatment, Sea Water Conditioning Unit (SWCU or Trident Unit) and Electro Chlorination Unit (ECU), submitted by Cyprus.

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## **MISCELLANEOUS**

### **Strategy to Address Marine Plastic Litter from Ships**

Following the Committee's adoption of the *IMO Action Plan to Address Marine Plastic Litter from Ships* ("the Action Plan") at MEPC 73 in resolution MEPC.310(73), at this session the Committee adopted Resolution MEPC.341(77) establishing the *Strategy to Address Marine Plastic Litter from Ships* ("the Strategy"), to guide and monitor the effective implementation of the Action Plan.

The Strategy defines the IMO's objectives in reducing international shipping's contribution to marine plastic litter:

- 1) reduction of marine plastic litter generated from, and retrieved by, fishing vessels;



- 2) reduction of shipping's contribution to marine plastic litter; and
- 3) improvement of the effectiveness of port reception and facilities and treatment in reducing marine plastic litter.

The Strategy also organizes actions identified in the Action Plan into a list of short-term, mid-term, long-term and continuous actions to be taken in support of achieving those objectives. Among the short-term actions, which have been assigned to IMO committees to begin progressing, the following are included:

- 1) Making a Garbage Management Plan / Garbage Record Book mandatory for ships of 100GT and above;
- 2) Enhancing enforcement of MARPOL Annex V;
- 3) Establishing a compulsory system for declaration of shipping containers lost at sea;
- 4) Enhancing seafarer training to address marine plastic litter, specifically for fishing vessel personnel;
- 5) Conduct of comprehensive study on marine plastic litter from all ships, including macro and microplastics.

Further mid- and long-term actions will be dependent upon the outcomes of the IMO Study on Marine Plastic Litter. Further guidance from the IMO Secretariat on initiating this study is expected at MEPC 78.

### **Draft Amendments to MARPOL Annex I**

The Committee approved draft amendments to Regulation 28 of MARPOL Annex I relating to watertight doors. The amendments are intended to address inconsistencies in several IMO instruments with respect to doors in watertight bulkheads. The Convention requires that the final waterline after flooding shall not be above the lower edge of any opening through which progressive downflooding may take place, however in accordance with the amended text, this waterline may exceed the lower edge of :

- 1) remotely operated sliding watertight doors,
- 2) hinged watertight access doors of the quick-acting or single-action type with open/closed indication locally and at the navigation bridge that are normally closed at sea, and
- 3) hinged watertight doors that are permanently closed at sea.

These amendments are to be adopted at MEPC 78, and will enter into force on 1 January 2024 in correlation with similar amendments to the Load Lines Convention and the IBC Code.

### **Draft Amendments to MARPOL Annex II**

The Committee approved draft amendments to Appendix I of MARPOL Annex II, *Guidelines for the categorization of noxious liquid substances*, in order to reflect updates to the GESAMP Hazard Profile table. As a result, the tables under the title "Abbreviated legend to the revised GESAMP Hazard Evaluation Procedure" have been replaced. These amendments are to be adopted at MEPC 78.

### **Postponement of Agenda Items**

Due to reduced capacity of the IMO Building and limitations of the virtual meeting format utilized at this session, the Committee agreed to postpone consideration of several significant proposals and work items, including the following items below. Related submissions will be referred to MEPC 78 (June 2022).

- 1) Numerous submissions related to EEDI, including proposed amendments to the 2018 Guidelines on the Method of Calculation of the Attained EEDI;
- 2) Possible Introduction of EEDI Phase 4;
- 3) Type-approval schemes for anti-fouling paints;
- 4) Review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book.