

INTERNATIONAL REGULATION NEWS UPDATE

The graphic features a central circular emblem with a world map, surrounded by a decorative border of leaves and branches, all set against a background of yellow and orange tiles.

MEPC 74 OUTCOME

The 74th session of the IMO Marine Environment Protection Committee (MEPC) met in London from May 13 to 17, 2019. Following the release of the final report from this meeting, *MEPC 74 Outcome* looks deeper into the implications of developments taking place and where they may lead. This edition focuses on action taken at MEPC 74, action scheduled for MEPC 75 (April 2020) and long-term plans under four main areas:

- [Ballast Water Management](#)
- [Air Pollution and Energy Efficiency](#)
- [IMO Strategy on GHG Emissions](#)
- [Amendments to Other IMO Instruments](#)

This Update provides additional information to that reported in the [MEPC 74 Brief](#) issued 17 May 2019 and insight as to what will be considered at the next MEPC 75 to be held in April 2020.

Also view our on-demand webinar [MEPC 74: Outcomes and Industry Impact](#) for further discussion on the latest environmental development from IMO.

For further information, contact ABS Regulatory Affairs: 281-877-6251 | ABSRegAff@eagle.org

BALLAST WATER MANAGEMENT

What to know...

- **For the Owner / Operator:** Globally, vessels continue to approach their date for being fitted with BW treatment systems complying with the D-2 biological standard. The [ABS 2019 Best Practices for Operations of Ballast Water Management Systems Report](#) provides insights and knowledge gained from the installation and daily operations of ballast water management systems of various technology types.
- **For the Designer / Shipyard:** [BWM.2/Circular 70](#) and [draft amendments to the BWM Convention](#) will, subject to adoption at MEPC 75 in April 2020, require a commissioning test of BWM systems at the time of installation (linked to either the Initial Survey or Additional Survey under the Convention). Some flag Administrations will begin requiring such commissioning tests in advance of the actual Convention amendment.
- **For the Supporting Industry:** The [BWMS Code](#) will enter into force on 13 October 2019, and any systems seeking approval after this date must be designed and tested in accordance with the new Code. Systems approved under the earlier standard ([MEPC.174\(58\)](#)) may continue to be installed until 28 October 2020.

OUTCOME OF MEPC 74

Entering the second year of the 5-year Experience-Building Phase (EBP) for development of the BWM Convention, the Committee approved [BWM.2 Circular 67/Rev.1](#), which provides the data gathering and analysis plan for the EBP. Additional guidance was added to improve consistency in sampling of treated ballast water by Port State Control officials, with reference to the [Standard Operating Procedures – Collection of Treated Ballast Water Samples Using an Inline Sample Port](#) which was developed by the ICES/IOC/IMO Working Group on Ballast. Development of sampling and analysis protocols is one priority of the EBP.

The Committee also approved [BWM.2 Circular 66/Rev.1](#), which revised this circular for the purpose of including references to the Code of Approval for Ballast Water Management Systems (BWMS Code). This circular provides a unified interpretation which clarifies the meaning of “date installed” as it relates to ballast water management system approval standards.

Also at this session, several ballast water management systems were progressed in their approval process.

Basic Approval was granted to the following systems:

- CleanBallast® Ocean Barrier System (filtration and in-line electrochlorination during uptake and neutralization with sodium thiosulfate at discharge)
- FlowSafe Ballast Water Management System (uses a SeaWater Conditioning Unit and a side-stream electrochlorination unit during uptake and, as needed, sodium thiosulfate for neutralization during discharge)

Final Approval was granted to the following systems:

- Envirocleanse inTank™ Bulk Chemical Variation (injects sodium hypochlorite as the Active Substance after uptake based on concentration-time (CT) treatment approach, and sodium thiosulfate for oxidant neutralization)

- MICROFADE II (uses a filter and injection of sodium dichloroisocyanurate dihydrate (SDCC) as an Active Substance during uptake and sodium sulfite for neutralization during discharge)
- Purimar™ Ballast Water Management System (uses a filter and side-stream electrochlorination during uptake and sodium thiosulfate for neutralization during discharge)

Final Approval was not granted for JFE BallastAce® that makes use of NEO-CHLOR MARINE®

UPCOMING AT MEPC 75 (APRIL 2020)

Several amendments to the BWM Convention were drafted and approved at MEPC 74 and are scheduled for adoption at MEPC 75.

Amendments to Regulation E-1 of the Convention will incorporate a requirement for a commissioning test at the time of system installation. This will be considered a requirement of the Initial or Additional Survey which grants issuance of certification reflecting D-2 compliance. The guidelines for this commissioning test have been provided in [BWM.2 Circular 70](#), approved at the MEPC 73 session. The intent of this test is not to qualify the system's Type Approval certification, but to confirm that the system's method of treatment is effective in the installed configuration. The Committee also invited Member States to implement commissioning testing as soon as possible for vessels in their registry, and to provide written instructions to the Recognized Organizations which act on their behalf.

Also scheduled for adoption at MEPC 75 is an amendment to the form of the International Ballast Water Management Certificate, which will add a field to acknowledge other alternative ballast water management approaches employed on board that satisfy the objectives of the Convention (in addition to the methods given in Regulations D-1, D-2 and D-4).

By the time MEPC 75 convenes, the BWM Convention will have been in force for over two years, and it is anticipated that the Committee will reassess the timeline of the Experience-Building Phase (noted in [BWM.2 Circular 67/Rev.1](#)). A report aggregating data and reflecting feedback from flag States, port States, and other stakeholders on the implementation of the Convention is to be developed by the IMO Secretariat in order to facilitate discussion and reflect on how successful

the implementation of the BWM Convention has been, and which aspects may require clarification.

WORK IN PROGRESS

Because of the amendments to Regulation E-1, which are scheduled to be adopted at MEPC 75, a request was made for the next session of the Sub-Committee on Pollution Prevention and Response (PPR 7, in Feb-2020) to revisit the content of BWM.2 Circular 70, and propose any necessary revisions to ensure that this circular on the commissioning test is in full alignment with the Convention amendments.

It is also anticipated that the PPR 7 Sub-Committee meeting will begin considering proposals for developing a standard of verification for ballast water compliance monitoring systems. This subject has been identified as an urgent matter to be addressed within the context of the Experience Building Phase of the BWM Convention, in order to provide guidance for consistent inspection and verification of the variety of ballast water management technologies.

In discussion within the Ballast Water Review Group at MEPC 74, concerns were raised once again regarding the fact that some vessel types may face an undue burden in trying to comply with the D-2 standards of the BWM Convention, due to their configurations or their operational parameters, and that options other than installation of a BWMS should be developed for such vessels. One specific vessel type, offshore support vessels, was provided with such guidance within [BWM.2 Circular 44](#) (approved at MEPC 65), but no other vessel types have not been similarly considered. Member States were invited to submit concrete proposals on this subject to the PPR 7 Sub-Committee meeting for further action.

LONG-TERM PLANS

Under the long-term output objectives of the MEPC and PPR, the Committee has deemed it necessary to pursue further revision of the current guidance provided on ballast water sampling and analysis in [BWM.2/Circ.42/Rev.1](#), with the target completion year for such guidance extended to 2021. This was agreed in light of a submission to MEPC 74 detailing a new proposed methodology which would support the need for rapid, simple and accurate assessment tools to verify the compliance of discharged ballast water. This discussion has been referred to the PPR 7 Sub-Committee meeting for action, and may affect [BWM.2 Circular 42/Rev.1](#)



(approved at MEPC 68), which provides the current guidance on sampling and analysis for ballast water discharges.

Also under these long-term objectives, development of revised guidance on methodologies used for enumerating viable organisms will also remain in discussion, with the target completion year of 2021. Most recently discussed at the PPR 6 Sub-Committee meeting in February 2019, was the current guidance on methodologies for determining the viability of organisms in ballast water samples is provided in [BWM.2 Circular 61](#) (approved at MEPC 71). A new method for enumerating organisms in the 10 – 50 µm size range has been proposed for consideration, involving the Flow Cytometry (FCM) method for particle characterization. Because of this, discussions on the subject will remain open for a potential revision to BWM.2 Circular 61.

As further data becomes available under the Experience-Building Phase (EBP) of the BWM Convention, new work items will be consolidated in accordance with the EBP timeline shown below.

Table 1: Summary of the EBP timeline

MEPC session	Timing	Milestone	EBP/MEPC action
73	Autumn 2018	Convention has been in force one year	
74	Spring 2019		First year of data available.
75	Spring 2020	Convention has been in force two years	Second year of data available, stocktaking of EBP timeline.
76	Autumn 2020	Convention has been in force three years	Partial third year of data available, enough to agree to data analysis report terms of reference.
77	Spring 2021		Full third year of data available, Draft analysis report received.
78	Spring 2022	Convention has been in force four years	Final analysis report received. Convention issues agreed.
79	Autumn 2022	Convention has been in force five years	Package of amendments submitted to the Parties.

ABS RESOURCES – BALLAST WATER MANAGEMENT

- 2019 Best Practices for Operations of Ballast Water Management Systems Report ([link](#))
- ABS Ballast Water Management Advisory ([link](#))
- ABS Ballast Water Management Technology Evaluation Service ([link](#))
- ABS Regulatory News ([link](#))
- ABS Rules and Guides ([link](#))

AIR POLLUTION AND ENERGY EFFICIENCY

What to know...

- **For the Owner / Operator:** With the IMO's 0.5% global limit on fuel oil sulphur content beginning its first phase on 1 January 2020, the MEPC has released numerous guidance documents to help ship owners address the operational issues of implementing this new regulation. Find more information ABS' [IMO 2020 Global Sulphur Cap website](#).
- **For the Designer / Shipyard:** Amendments to MARPOL Annex VI were approved (to be adopted at MEPC 75) which will accelerate the EEDI Phase 3 to 2022 (from 2025). The EEDI Phase 3 reduction factors remain unchanged, despite concerns about the ability of bulk carriers and tankers to comply. Read more in the [ABS 2019 Regulatory Debrief on EEDI Phase 3 Compliance](#).
- **For the Supporting Industry:** In several published circulars, the IMO has provided guidance to fuel oil suppliers and Port State Control officials in support of their roles in implementing the 0.50% global sulphur limit. These are detailed below, and address supply, sampling and non-availability issues in fuel oil compliance.

OUTCOME OF MEPC 74

MARPOL Annex VI – Air Pollution

From 1 January 2020, the limit for sulphur content in fuel oil used onboard ships will be reduced to 0.50% for operations outside of Emission Control Areas (and remains 0.10% within ECAs), to reduce sulphur oxide emissions from ships and provide environmental benefits for the world. The 1 March 2020 carriage ban of non-compliant fuel reinforces these benefits. With no grace period for this limit, compliance at the beginning of 2020 will be contingent upon industry coordination. To support this, MEPC 74 issued the following guidance documents to clarify roles and responsibilities of the parties involved:

For ship owners/operators:

- 2019 Guidelines for the Consistent Implementation of the 0.5% Sulphur Limit under MARPOL Annex VI – Resolution [MEPC.320\(74\)](#)
 - Provides guidance on ship implementation planning, safety considerations related to low-sulphur compliant fuels, and actions for addressing compliant fuel oil non-availability

(including the Fuel Oil Non-Availability Report, FONAR).

- Guidance on Indication of Ongoing Compliance in the Case of Failure of a single monitoring Instrument, and Recommended Actions to Take If the EGCS Fails to Meet the 2015 EGCS Guidelines – [MEPC.1/Circ.883](#)
 - Provides guidance on how to address Exhaust Gas Cleaning System (EGCS) sensor failures and/or short-term exceedances of emissions.
- 2019 Guidelines for On Board Sampling for the Verification of Sulphur Content of Fuel Oil Used On Board Ships – [MEPC.1/Circ.864/Rev.1](#)
 - Provides guidance on sampling location and specimen handling for fuel oil testing under MARPOL Annex VI.

For fuel oil suppliers:

- Delivery of Compliant Fuel Oil by Suppliers – [MSC-MEPC.5/Circ.15](#)

- This circular was issued to reaffirm Member States' duty to ensure that fuel oil suppliers in their jurisdiction will deliver fuel oil with properties matching the bunker delivery note.
- Guidance on Best Practice for Fuel Oil Suppliers for Assuring the Quality of Fuel Oil Delivered to Ships – [MEPC.1/Circ.875/Add.1](#)
 - Provides guidance to fuel oil suppliers for quality control during production, transport, and transfer of bunkers, acknowledging that bunker fuel or blend components may change during each phase. Recommendations on sampling and documentation are also given.

For States and Port State Control officials:

- 2019 Guidelines for Port State Control under MARPOL Annex VI Chapter 3 – Resolution [MEPC.321\(74\)](#)
 - Superseding the 2009 edition, these Guidelines provide updated guidance to Port State Control regarding the latest NO_x and SO_x emission regulations, including guidance on detainable deficiencies.
- Guidance for Port State Control on Contingency Measures for Addressing Non-Compliant Fuel Oil – [MEPC.1/Circ.881](#)
 - Provides recommendations on how to address non-compliance fuel oil reported onboard a vessel. Emphasis is placed on actions that may be predetermined in a Ship Implementation Plan and information provided in a Fuel Oil Non-Availability Report (FONAR).
- Guidance for Best Practice for Member State/Coastal State – [MEPC.1/Circ.884](#)
 - Provides guidance to Member States for promoting MARPOL Annex VI compliance within their jurisdiction, including best practices on management / oversight of local fuel suppliers to promote compliant fuel availability.

Also related to the 2020 global limits on fuel oil sulphur content, the Committee approved [MEPC.1 Circular 887](#) which encourages the reporting of fuel oil availability and quality in GISIS, for later studies of the consistent implementation of the 0.50% m/m sulphur limit.

MARPOL Annex VI – Energy Efficiency

On the subject of MARPOL Annex VI Chapter 4, the MEPC 74 session adopted amendments to the 2018 Guidelines on the Method of Calculation of the Attained Energy Efficiency Design Index (EEDI) for New Ships. The amendments, given in Resolution [MEPC.322\(74\)](#), provide a revised Attained EEDI formula with factor f_m introduced to address ice-classed ships having *IA Super* and *IA* designations.

UPCOMING AT MEPC 75 (APRIL 2020)

Several amendments to MARPOL Annex VI were drafted and approved at MEPC 74 and are scheduled for adoption at MEPC 75.

MARPOL Annex VI – Air Pollution

To clarify some aspects of the implementation of the 2020 global limit of fuel oil sulphur content, a collection of amendments will be adopted to introduce new terminology related to the sampling of fuel oil for testing. Definitions for “MARPOL delivered sample”, “Onboard sample” and “In-use sample” have been introduced to distinguish different points of sampling to confirm fuel oil compliance with sulphur content limitations. New regulation 14.8 and amended 18.8.2 have been drafted to give authority to any Party to the MARPOL Convention to request fuel oil sampling from vessels in their jurisdiction. Additionally, drafted amendments to the Fuel Verification Procedure given in Appendix VI of MARPOL Annex VI will be adopted at MEPC 75 to support these new sampling requirements.

[MEPC.1 Circular 882](#), approved at MEPC 74, allows the early application of the draft amendments in Regulations 14.8, 18.8.2 and Appendix VI, until they are formally adopted and enter into force (anticipated as Fall 2021).

Drafted amendments to regulation 14 will also require installation of an In-use fuel oil sampling point (see [MEPC.1/Circ.864/Rev.1](#)), which for existing vessels must be installed before the first IAPP Renewal survey that occurs 12 months or more after entry into force of the amendment.

MARPOL Annex VI – Energy Efficiency

Also scheduled for adoption at MEPC 75 is an amendment to Tables 1 and 2 of Regulation 21 in

MARPOL Annex VI, which will accelerate the implementation of EEDI Phase 3 from 2025 to 2022. Revisions which have been drafted for Table 1 are shown in **blue text** in the following table:

Ship type	Starting year	Reduction rate
Gas carriers	2022 (≥15,000 DWT)	30% (retain)
	2025 (10,000 – 15,000 DWT)	30% (retain)
	2025 (2,000 – 10,000 DWT)	0 – 30% (retain)
Containerships	2022 (200,000 DWT and above)	50%
	2022 (120,000 – 200,000 DWT)	45%
	2022 (80,000 – 120,000 DWT)	40%
	2022 (40,000 – 80,000 DWT)	35%
	2022 (15,000 – 40,000 DWT)	30% (retain)
	2022 (10,000 – 15,000 DWT)	15% - 30%
General cargo ships	2022 (15,000 DWT and above)	30% (retain)
	2022 (3,000 – 15,000 DWT)	0% - 30% (retain)
Refrigerated cargo ships	2025 (5,000 DWT and above)	30% (retain)
	2025 (3,000 – 5,000 DWT)	0% - 30% (retain)
Combination carriers	2025 (20,000 DWT and above)	30% (retain)
	2025 (4,000 – 20,000 DWT)	0 – 30% (retain)
LNG carriers	2022 (10,000 DWT and above)	30% (retain)
Cruise passenger ships having non-conventional propulsion	2022 (85,000 GT and above)	30% (retain)
	2022 (25,000 – 85,000 GT)	0% - 30% (retain)

Additionally, the following revisions drafted for Table 2 will Increase the required EEDI for large bulkers above 279,000dwt :

Ship type defined in regulation 2	a	b	c
2.25 Bulk carrier	961.79	DWT of the ship where DWT≤279,000 279,000 where DWT > 279,000	0.477

WORK IN PROGRESS

In relation to the amendments for fuel oil sampling noted above, further guidance is being developed for onboard sampling of fuel oil not in use by the ship, which has been assigned to the next session of the Sub-Committee on Pollution Prevention and Response (PPR 7, in Feb-2020).

Also, further discussion will take place at PPR 7 to address the discharge of liquid effluents from exhaust gas cleaning systems into the sea, with an objective of producing harmonized guidance on this subject by 2021. In relation to this, the 2015 Guidelines on Exhaust Gas Cleaning Systems (Resolution [MEPC.259\(68\)](#)) will be under review. If this is satisfactorily progressed at PPR 7, then it will be taken up as an urgent matter at MEPC 75.

Additionally, amendments to MARPOL Annex VI and the NOx Technical Code will also be under development to address the use of marine diesel engines with multiple operational profiles.

LONG-TERM PLANS

A review of the Energy Efficiency Design Index (EEDI) is planned to consider:

- EEDI implementation dates and the EEDI reference line parameters for certain ship types that, despite new technologies and innovations, are still faced with significant challenges to comply with the EEDI;
- Possible introduction of EEDI Phase 4;
- Application of EEDI for non-conventional ships

MEPC and PPR will undertake an evaluation of rules and guidance on the discharge of liquid effluents from exhaust gas cleaning systems (EGCS) into waters, including conditions and areas of discharge, with the view to harmonizing regional requirements

At this stage, a strong emphasis is being placed on data reporting through IMO's GISIS database for various subjects:

- IMO DCS data reporting beginning in 2020;
- Reporting of fuel oil data under MARPOL VI/Regulation 18;
- Reporting of port locations where compliant fuel oil is available;
- Ship-specific evidence of non-availability of compliant fuel oil;
- Instances of fuel oil supplier's failure to provide compliant fuel oil.
- a new module in the GISIS database is under development for reporting fuel oil safety matters.



The goal of these efforts is to pursue the consistent quality of fuel oil on ships while also maintaining safe operations, with the overall objective of continuing to improve air emissions standards in shipping. To this end, and also recognizing that new fuel grades may be introduced related to the implementation of the 2020 global sulphur limit, the Maritime Safety Committee (MSC) has also been tasked to develop mandatory requirements to enhance ship safety in relation to use of fuel oil.

ABS RESOURCES – AIR POLLUTION AND ENERGY EFFICIENCY

- ABS Energy Efficiency Services website [\(link\)](#)
- ABS Webinar – “All Eyes on 2020” / IMO Global Sulphur Cap [\(link\)](#)
- ABS Whitepaper – Air Lubrication Technology [\(link\)](#)
- ABS Regulatory News [\(link\)](#)
- ABS Rules and Guides [\(link\)](#)

IMO STRATEGY ON GHG EMISSIONS

What to know...

- **For the Owner / Operator:** The IMO has set ambitious targets for the reduction of greenhouse gas emissions in the shipping industry by 2030 and 2050. The new [ABS Low Carbon Shipping Outlook](#) defines ship technologies, operational efficiencies and alternative fuels and energy sources needed to reach 2030 and 2050 targets. This outlook is a tool to help shipowners understand the task ahead and effectively assess their options for a transition to low-carbon operations.
- **For the Designer / Shipyard:** The MEPC continues to streamline the candidate short-term measures for reducing GHG emissions for further development, and potential implementation within the next 5 years. The current status of this is discussed below, and further developments on this subject will indicate which design/operational enhancements are receiving support to implement.
- **For the Supporting Industry:** At this session, resolution [MEPC.323\(74\)](#) was adopted, calling for voluntary cooperation between the port and shipping sectors to facilitate reduction of GHG emissions. It provides recommendations for ways that Member States can work with support from industry to improve port capabilities to contribute to GHG reduction.

OUTCOME OF MEPC 74

Considering future work to support the follow-up actions of the Initial Strategy, several steps were taken at MEPC 74 to organize and inform the work of the next several sessions.

Approval was given for the IMO Secretariat to initiate the 4th IMO GHG Study, which is intended to inform future work under the IMO Initial Strategy on Reduction of GHG Emissions from Ships. The study was formally initiated by the Committee's adoption of the Terms of Reference for the 4th IMO GHG Study, which can be found in the final report of the MEPC 74 Committee meeting.

The Terms of Reference for the study require collection of data on global emissions of GHGs emitted from ships of 100 GT and above engaged in international voyages. This inventory of emissions will focus on the period from 2012 to 2018, as far as statistical data are available, and will seek to differentiate emissions from domestic voyages as compared to international voyages. The study will also provide a projection of transport demand and shipping emissions out to 2050. The Committee anticipates

receiving the final report of the 4th IMO GHG Study at MEPC 76 in October 2020.

The Terms of Reference also include criteria for the evaluation of tenders for the 4th IMO GHG Study. It is expected that a contract to conduct the study will be awarded by 31 October 2019.

An invitation to nominate membership of the Steering Committee for this study was sent out in May 2019 and membership announced in June 2019 through [Circular Letter No.3989](#). The Steering Committee for the 4th IMO GHG Study will be composed of the following Member States: Belgium, Brazil, Canada, China, Denmark, Japan, Netherlands, Norway, Panama, Republic of Korea, Singapore, Turkey and United States. This steering committee will be responsible for providing input on the tendering selection process and conducting a quality review of the study to confirm that it meets the terms of reference.

[MEPC.1 Circular 885](#) was approved by the Committee and provides the agreed procedure for assessing impacts on States of candidate measures which are proposed under the Initial Strategy on GHG Emissions. For States

and organizations who are proponents of a given candidate measure to reduce GHG emissions, this procedure requires the proponent to submit an initial impact assessment as part of their proposal to the Committee. There are up to four steps in the procedure:

- Step 1: initial impact assessment, to be submitted as part of the initial proposal to the Committee for candidate measures*;
- Step 2: submission of commenting document(s), if any;
- Step 3: comprehensive response, if requested by commenting document(s); and
- Step 4: comprehensive impact assessment, if required by the Committee.

A proponent of a measure should submit an initial impact assessment at a minimum but may submit a more detailed assessment. Circular 855 also provides guidelines for the minimum content of an impact assessment. It is envisioned that each step in this process will take place at successive meetings of either the MEPC or the Intersessional Working Group on Reduction of GHG Emissions from Ships (ISWG-GHG), with the condition that MEPC and ISWG-GHG meetings which are held back-to-back will be counted as one meeting.

Additionally, resolution [MEPC.323\(74\)](#) was adopted to call for voluntary cooperation between the port and shipping sectors to facilitate reduction of GHG emissions. It provides a number of recommendations to Member States for actions which would support GHG emission reduction while in port, such as promoting development of in-port power-to-ships from renewable sources, encouraging industry development for supply and availability of low-carbon fuels, and supporting efforts in global digital data to optimize voyages and port calls.

UPCOMING AT MEPC 75 (APRIL 2020)

The Committee has approved the continued meeting of the ISWG-GHG, with the 6th session of the group planned to meet again in November 2019 to further progress issues on GHG emissions reduction, for submittal to the MEPC 75 meeting.

Submittals have already been made to ISWG-GHG 6 for a candidate measure involving development of an energy efficiency design index for existing ships (EEXI) to improve the operational energy efficiency of the existing vessel fleet. An initial impact assessment has been submitted, and following the procedure for assessment of

candidate measures, IMO Members will have until MEPC 75 to submit commenting documents on this proposal.

It is also expected that MEPC 75 will issue guidance (to be developed in ISWG-GHG) promoting the development of a National Action Plan (NAP) by individual Member States, to establish the unique and specific capabilities of each State in contributing to reducing GHG emissions from international shipping.

WORK IN PROGRESS

Future work will be based on the submittal of proposals under the procedures for assessment of candidate measures, which requires submittal of an initial impact assessment. It is expected that more of these impact assessments will be submitted to the coming sessions.

As of MEPC 74, a total of 37 candidate measures had been noted so far, which were initially categorized into 14 different approaches to address these emissions. The Committee noted that there were multiple interlinkages between these different approaches, and have streamlined them into 3 approaches for further development:

1. Consideration of proposals to improve the operational efficiency of existing ships, with a view to developing amendments to Chapter 4 of MARPOL Annex VI (and associated guidelines, as appropriate);
2. Consideration of proposals to reduce methane slip and emissions of Volatile Organic Compounds (VOCs); and
3. Consideration of proposals to encourage uptake of alternative low-carbon and zero-carbon fuels, including the development of lifecycle GHG/carbon intensity guidelines for all relevant fuel types (and associated incentive schemes, as appropriate).

Proposals for candidate measures to reduce GHG emissions will be considered under one of these three approaches, which will also help facilitate the comparison of impact assessments for each proposal.

LONG-TERM PLANS

Under the objectives of the IMO Initial Strategy for Reduction of GHG Emissions from Ships, it is directed that short-term measures would need to be implemented before 2023 in order to achieve the 2030 emission



reduction goals. The strategy itself would also be under review in the coming years, with the intention of also adopting a “Revised IMO Strategy on Reduction of GHG Emissions from Ships” in 2023.

Mid-term measures for reducing GHG emissions in shipping would be those measures which could potentially be finalized in the 2023-2030 period and may include new emission reduction mechanisms and market-based measures to incentivize GHG reduction, among other things.

Long-term measures would be those measures requiring development and innovation beyond 2030 and may include the support of developing zero-carbon fuels (including access to such fuels), among other steps towards further decarbonization of the shipping industry.

ABS RESOURCES – GHG EMISSIONS

- ABS Greenhouse Gas Ratings service ([link](#))
- ABS Global Sustainability Center ([link](#))
- ABS Low Carbon Shipping Outlook ([link](#))
- ABS Regulatory News ([link](#))
- ABS Rules and Guides ([link](#))

AMENDMENTS TO OTHER IMO INSTRUMENTS

What to know...

- **For the Owner / Operator:** The use of approved electronic record books, in lieu of paper records, has been accepted under the MARPOL Convention. ABS is authorized to approve electronic record books on behalf of nearly 100 flag States. Additionally, a major revision to the IBC Code was adopted at this session, which includes revisions to the carriage requirements and toxicity categorization of numerous cargoes. [ABS CHEM Software](#) is available to support chemical tanker owners to quickly assess whether their vessel is suitable to carry a specific type of chemical.
- **For the Designer / Shipyard:** Certification requirements for Selective Catalytic Reduction (SCR) systems have been revised in the NOx Technical Code. The revisions reaffirm the principle that a NOx-reducing device is to be included within the engine's certification and part of its Technical File.
- **For the Supporting Industry:** Resolution [MEPC.313\(74\)](#) will amend MARPOL Annex II with new tank washing requirements for cargoes identified as "persistent floating products", requiring that residue/water mixture generated during the prewash is be discharged to a reception facility at the port of unloading. This will apply to specific geographical areas, and require new record keeping and procedures.

OUTCOME OF MEPC 74

Electronic Record Books

The Committee adopted three resolutions ([MEPC.314\(74\)](#), [MEPC.316\(74\)](#), [MEPC.317\(74\)](#)) which collectively address the acceptability and use of electronic record books in lieu of paper record books under the MARPOL Convention. The following amendments and types of shipboard records are included:

1. Oil Record Book, parts I and II (MARPOL Annex I, regulations 17.1 and 36.1);
2. Cargo Record Book (MARPOL Annex II, regulation 15.1);
3. Garbage Record Book, parts I and II (MARPOL Annex V, regulation 10.3);
4. Ozone-depleting Substances Record Book (MARPOL Annex VI, regulation 12.6);
5. recording of the tier and on/off status of marine diesel engines (MARPOL Annex VI, regulation 13.5.3);

6. Record of Fuel Oil Changeover (MARPOL Annex VI, regulation 14.6); and
7. Record Book of Engine Parameters (NOX Technical Code, paragraph 6.2.2.7).

The Committee also adopted resolution [MEPC.312\(74\)](#) – Guidelines for the Use of Electronic Record Books Under MARPOL, to provide a clarifying standard for capabilities, security and Administration acceptance of electronic systems for maintaining these records. These amendments will enter into force on 1 October 2020.

MARPOL Annex II – Persistent Floating Products

The Committee approved resolution [MEPC.315\(74\)](#), which amends MARPOL Annex II to include requirements to regulate the discharge of residues and tank washings from tanks carrying products defined as "persistent floaters". The regulation will apply to specific geographic areas, and will require a prewash procedure which discharges the tank washings to a reception facility at the port of unloading.

After this initial prewash, any water subsequently introduced into the tank may be discharged in accordance with the current discharge standards in MARPOL Annex II / Regulation 13.2. This amendment will enter into force on 1 January 2021, and related amendments have been made to the IBC Code and BCH Code.

IBC Code Amendments

The Committee adopted resolution [MEPC.318\(74\)](#) containing amendments to several chapters of the IBC Code. Amendments to chapter 15 will require that vessels carrying bulk liquids prone to H₂S formation must be provided with H₂S detection equipment. Toxic vapour detection instruments complying with 13.2.1 of the Code for testing for H₂S may be used to satisfy this requirement.

The amendment made to chapter 16 introduces prewash requirements which are referenced from new paragraph 13.7.1.4 of MARPOL Annex II, for substances which are designated as persistent floaters.

Additionally, a complete replacement of chapters 17, 18, 19 and 21 has been issued to incorporate references to the above amendments. Carriage requirements for chemicals have also been reviewed, and toxicity categorization of products has been revised.

These amendments enter into force on 1 January 2021, for new and existing ships to which the IBC Code applies.

BCH Code Amendments

The Committee adopted resolution [MEPC.319\(74\)](#) containing amendments to chapters IV and V of the BCH Code which correlate to the amendments made to the IBC Code at this session. The amendments to chapter IV require that vessels carrying bulk liquids prone to hydrogen sulphide formation under this Code must also be provided with H₂S detection equipment. Toxic vapour detection instruments complying with 3.11.1 of the Code for testing for H₂S may be used to satisfy this requirement.

Additionally, the amendments to chapter V introduce prewash requirements which are referenced from new paragraph 13.7.1.4 of MARPOL Annex II, for substances which are designated as persistent floaters. These amendments enter into force on 1 January 2021, in conjunction with IBC Code and MARPOL Annex II amendments.

NOx Technical Code Amendments

In addition to the amendments regarding Electronic Record Books, the Committee adopted amendments to the NOx Technical Code concerning certification requirements for Selective Catalytic Reduction (SCR) systems. Resolution [MEPC.317\(74\)](#) provides clarify amendments to sub-paragraph 2.2.5.1 to specify the established principles that a NOx-reducing device is to be included within the engine's certification as a recognized component of the engine, and recorded in the Technical File accordingly. Associated amendments were adopted for the 2017 Guidelines addressing additional aspects to the NOx Technical Code for SCR systems, in resolution [MEPC.313\(74\)](#). These amendments will enter into force on 1 October 2020.

Marine Plastic Litter from Ships

At MEPC 74, terms of reference were approved for the first IMO Study on Marine Plastic Litter from Ships. In support of the IMO Action Plan to Address Marine Plastic Litter from Ships, this study will assess the availability of port reception facilities and recycling technologies available to ships, as well as assessment of the volume and types of plastic litter being collected during fishing operations. It was also recognized that other United Nations groups, such as GESAMP and FAO, are also conducting studies related to plastic litter in the ocean environment, and their findings should be considered. It is anticipated that the IMO Study on Marine Plastic Litter will be established in late 2020, after being informed by ongoing work in other United Nations group also researching this issue.

UPCOMING AT MEPC 75 (APRIL 2020)

AFS Convention

Draft amendments to the AFS Convention had been developed at the PPR 6 Sub-Committee meeting and submitted for approval at MEPC 74. The amendments prohibit anti-fouling systems containing cybutryne. As a consequence of these amendments, ship hulls with anti-fouling systems using cybutryne would be required to remove or seal those systems in accordance with agreed timeline. However, concern was raised as to whether products were available which could reliably seal these systems and prevent leaching of the cybutryne into the



environment. Because of this, the issued was referred back to the sub-committee at PPR 7 for further discussion and is expected to be revisited at MEPC 75.

WORK IN PROGRESS

Marine Plastic Litter from Ships

Several short-term actions related to Marine Plastic Litter will be referred to relevant Sub-Committees to develop appropriate implementation. This work should begin in 2020, with the goal remaining to complete and implement actions by 2025. These short-term actions include:

- Guidance to Member States on their responsibilities in enforcement of MARPOL Annex V on fishing vessels, and collection of information on accidental loss of fishing gear (from PPR 7);
- Consideration of making the Garbage Record Book mandatory for ships of 100G GT and above (from PPR 7);
- Improvement of seafarer training, through STCW Code, to increase marine environmental awareness for personnel on fishing vessels (from HTW 7)
- Consider ways to communicate the location of lost shipping containers, and establish a compulsory system for declaration of lost containers (from MSC 102).

Use and Carriage of Heavy Fuel Oil as fuel by Ships in Arctic Waters

Work is expected to continue at the PPR Sub-Committee regarding discussion of a potential ban on heavy fuel oil (HFO) as ships' fuel in Arctic waters. A working definition of HFO was agreed at the PPR 6 meeting in February 2019, which includes fuel oils having a density higher than 900 kg/m³ at 15°C or a kinematic viscosity higher than 180mm²/s at 50°C. A methodology to analyze the impact of such a ban was also agreed upon. Further discussion on this subject and submission

of impact assessments is expected at PPR 7 in February 2020.

Impact on the Arctic of Emissions of Black Carbon from International Shipping

Work from the PPR 6 Sub-Committee meeting on the subject of assessing impacts of black carbon on the Arctic was discussed at MEPC 74. PPR 6 had progressed this subject in terms of providing an approved definition of Black Carbon from international shipping, identifying the most appropriate measurement methods for black carbon, and providing a compilation of identified candidate control measures to reduce the impact on the Arctic of black carbon emissions from international shipping.

At MEPC 74, concerns were expressed that placing controls on black carbon emissions at this stage would be premature, considering the need to study the impact of the 0.50% global sulphur limit, as well as the influence of different fuel types and engine technologies on black carbon emissions. This subject is to be developed further at PPR 7.

LONG-TERM PLANS

General items which the MEPC intends to pursue in the 2020-2021 period include the following:

1. Revision of MARPOL Annex IV and associated guidelines to introduce provisions for record-keeping and measures to confirm the lifetime performance of sewage treatment plants;
2. Standards for shipboard gasification of waste systems and associated amendments to regulation 16 of MARPOL Annex VI;
3. Follow-up work emanating from the Action Plan to address marine plastic litter from ships;
4. Development of an operational guide on the response to spills of Hazardous and Noxious Substances (HNS).

ABS RESOURCES – OTHER IMO INSTRUMENTS

- ABS CHEM Software – IBC Code ([Download Request](#)) ([Video Demo](#))
- ABS Regulatory News ([link](#))
- ABS Rules and Guides ([link](#))

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