IMO News Brief
PPR 12

The 12th session of Pollution Prevention and Response Sub-Committee (hereinafter referred to as "PPR") was convened as in-person and online meeting from 27th to 31st January 2025. The primary focus of the meeting was to address items related to the interim guidance on the carriage of Biofuel blends by conventional bunkering vessels, guidance on matters relating to in-water cleaning, amendments to SCR guidelines, discussions about amendments to MARPOL Annex IV and other relevant issues. This News Brief provides an overview of the key outcomes of PPR 12 regarding major technical issues.

Summary

Please note that the information presented here only becomes legally effective once officially adopted as mandatory instruments by Marine Environment Protection Committee (hereafter referred to as ''MEPC''). Below is a brief over-view of the outcomes from PPR 12.

① Interim Guidance on the carriage of blends of biofuels and MARPOL Annex I cargoes by conventional bunker ships
② Guidance on in-water cleaning of ships' biofouling
③ Amendments to exist SCR guidelines to remove ambiguities and ensure consistent application
④ Discussion on revision of MARPOL Annex IV and associated guidelines
⑤ Review of the Action Plan to address Marine Plastic Litter form ships
⑥ Amendment to the 2023 Guidelines for the Development of the Inventory of Hazardous Materials

Safety and pollution hazards of chemicals and preparation of consequential amendments to the IBC Code

Interim Guidance on the carriage of blends of biofuels and MARPOL Annex I cargoes by conventional bunker ships

MEPC 81 considered a proposal discussing the issues on the use of biofuels to reduce GHG emissions from international shipping and proposing a draft MEPC circular providing guidance on the carriage requirements of biofuels for marine bunkering vessels certified for the carriage of MAPROL Annex I cargoes.

The use of biofuels as a drop-in fuel solution in IMO's carbon intensity and reduction of GHG emissions is recognized by the LCA guidelines and, therefore,

industry is moving towards wider availability and uptake of biofuels. However, it was identified that convention bunkering ships certified for the carriage of oil, marine residual or distillate fuels oil and MARPOL Annex I cargoes cannot carry biofuels and its blends of more than 25% by volume of biofuels since those bunkering vessels should be certified to comply with the carriage requirements in accordance with the IBC Code and the 2019 *Guidelines for the carriage of MARPOL Annex I cargoes and biofuels* (MSC-MEPC.2/Circ.17) as a chemical tanker.

With this background, at MEPC 81, the development of relevant interim guidance was proposed to allow conventional bunker ships complying with MARPOL Annex I (Oil) requirements to carry biofuel blends (with a maximum blend of 30%) within the scope of MARPOL Annex II (Noxious Liquid Substances).
MEPC 81, considering that the interim guidance was issue related to carriage requirements, instructed PPR Sub-Committee and 30th ESPH Working Group to proceed further discussion on development of carriage requirement on biofuels for conventional bunkering ships. 30th ESPH Working Group developed a draft *Interim Guidance on the Carriage of Blends of Biofuel and MARPOL Annex I Cargoes by Conventional Bunker Ships* and subsequently reported to PPR 12.

At PPR 12, the majority of Member States supported the development of interim guidance, while some Member States proposed clarifications regarding the definition of conventional bunker ships and the notation of the IOPP Certificate. Following further discussion on these proposals, the drafting group finalized the draft *Interim Guidance on the Carriage of Blends of Biofuel and MARPOL Annex I Cargoes by Conventional Bunker Ships,* which was approved at PPR 12 and reported MEPC Committee with a view to approval by MEPC 83 (April 2025).

Discussion on the prewash requirement to FAME (fatty acid methyl esters)

PPR 12 reviewed a proposal to modify the carriage requirements for fatty acid methyl esters (FAME), particularly the introduction of the MARPOL prewash requirement, considering potential to solidify in the marine environment and material properties. While the necessity of the proposal was recognized, it was highlighted that the importance of ensuring the availability of adequate port reception facilities and need for developing specific guidelines for prewashing FAME products. Accordingly, PPR 12 agreed to refer the matter to the 31st ESPH Working Group for further consideration.

Evaluation of cleaning additives

ESPH assessed cargo tank cleaning additives, and out of a total of 40 additives, 18 were found to meet the requirements of regulation 13.5.2 (the use of cleaning agents or additives) of MARPOL Annex II. PPR 12 completed this assessment and found that 12 out of 23 additional cleaning additives complied with the same requirements. The list will be included in MEPC.2/Circular (`25.12).

Classification of liquid substances transported in bulk

The following carriage requirement for the material will be included in List 1(Pure or technically pure products and mixtures assessed as a whole) of MEPC.2/Circular (`25.12)

- Glycerol/sorbitol blend, propoxylated and ethoxylated
- Sorbitol, propoxylated
- Ferric sulphate solution
- Palm oil, empty fruit bunch
- Used cooking oil (Triglycerides, C16-C18 and C18 unsaturated, containing less than 25% free fatty acids) (m) (n bis) (amended requirements)
- Bio-fuel blends of Gasoline and Ethyl alcohol (>25% but <99% by volume) (amended requirements)
- Fatty acids, (C16+) (amended requirements)
- Oleic acid (amended requirements)

The carriage requirement of 34 trade-named mixtures will be included in List 3(mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards) of MEPC.2/Circular (`25.12)

Amendments to MARPOL Annex II in order to improve the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity

PPR discussed improving the effectiveness of cargo tank stripping, tank washing operations and prewash procedures for products with a high melting point and/or high viscosity. PPR 12 agreed that proposals entailing new equipment, upgrades of equipment or ship design changes would be excluded from the scope of the current work output, and agreed that the work or proposal should be limited to the following:

- cargoes for which regulation 13.7.1.4 (Discharge of residues of Category Y) of MARPOL Annex II was applicable (substances assigned to pollution category Y) within the geographical area (North Sea West European waters, Baltic Sea area, Western European waters, Norwegian Sea) for special requirement 16.2.7 as defined in regulation 13.9 of MARPOL Annex II
- addressing operational procedures for more effective tank stripping, tank washing and prewashes through development of amendments mainly to appendices IV (P&A manual) and VI (prewash procedures) to MARPOL Annex II and associated guidance

In PPR 12, some Member States expressed concerns about potential operational burdens (e.g., additional fuel consumption etc.). Accordingly, PPR 12 recognized that there are issues, such as the difficulty in mandating a tank-washing procedure effective for all scenarios and impractical washing water temperatures

and tank washing time recommended. PPR 12 subsequently agreed to refer the matter to 31st ESPH Working Group for further consideration and to request MEPC 83 to extend the target completion year of this agenda item to 2027.

Development of guidance on matters relating to in-water cleaning

Completion of the development of guidance on matters relating to in-water cleaning

To support the implementation of the *2023 Biofouling Guidelines* adopted as Res.MEPC.378(80), the Sub-Committee initiated discussions to develop a draft guidance on matters relating to in-water cleaning. As a result, PPR 12 finalized the draft Guidance on In-Water Cleaning of Ships' Biofouling with a view to adoption by MEPC 83 (April 2025)

<Key points of the Guidance on In-Water Cleaning of Ships' Biofouling>

① Recommendation on in-water cleaning operations (pre-cleaning, conducting, post-cleaning inspection, reporting and record-keeping)

② Procedures for in-water cleaning (including approval procedures for in-water cleaning service providers)

③ Approval procedures and performance standard for in-water cleaning systems

Further discussion on matters relating to in-water cleaning

PPR 12 invited member states and international organizations to submit a proposal to PPR 13 for further discussion on assessment/inspection methods of in-water cleaning systems

- The methodology for testing the compatibility between IWCS and various coating types
- Methods for assessing the minimum performance standard after IWCS enter into service
- How to conduct in-water inspections to determine if in-water cleaning is needed

Reduction of the impact on the Arctic of Black Carbon emissions from international shipping

Discussion on the regulatory measure for Black Carbon and concept of Polar Fuels

In PPR 12, discussions encompassed the review of existing regulatory measures for black carbon and variable opinions on the standard and concept of Polar Fuels. Consideration was given to the characteristics and emission measurement methods of black carbon based on engine operating conditions discussed previously, alongside the definition and standards proposed for Polar Fuels. Particularly, standard for Polar Fuel was suggested, including density, viscosity, carbon residue content by mass, cetane index or cetane number and pour point.

However, the Sub-Committee noted that a thorough review of the Polar Fuel concept could not be conducted based solely on the documents submitted to PPR 12. Therefore, PPR 12 invited interested member states to submit concrete proposals to PPR 13 based on scientific evidence. Additionally, the deadline for the work agenda on black carbon was agreed to extend to 2027

Evaluation and harmonization of rules and guidance on the discharge of discharge water from EGCS into the aquatic environment, including conditions and areas

Development of Terms of Reference for the GESAMP about the EGCS representative emission factors regarding the regulatory measures

PPR 12 finalized the Terms of Reference for the GESAMP task team to conduct further work on emission factors for use in the environmental risk assessment of the regional impact of discharge water from EGCS which is alternative measure to comply with sulfur content of fuel oil in accordance with the MARPOL Annex VI.

GESAMP Task Team's Role and Terms of Reference (ToR)

① Develop a standard methodology for calculating emission factors as the top priority
② Report the resulting emission factor data set.
③ Review best practices for laboratory analysis and statistical methodologies.
④ Evaluate background concentrations of effluent and review chemicals not included in the 2022 EGCS effluent risk assessment guidelines (MEPC.1/Circ.899)
⑤ Develop a research process to incorporate additional experiments and data collection if necessary,

considering the sustainability of emission factor development

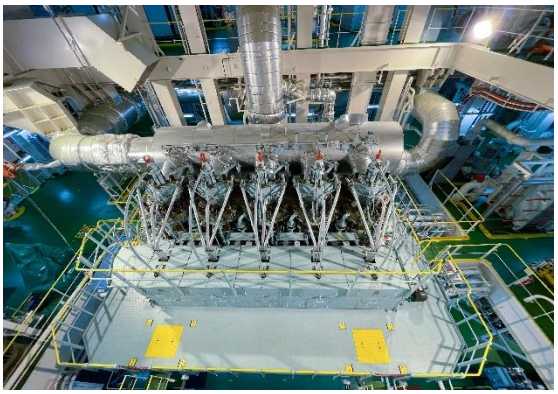
Additionally, it was agreed that, following the development of EGCS emission factors by the GESAMP Task Team, future regulatory measures for EGCS discharge water would be determined based on research results and scientific evidence provided by Member States.

Amendments to the 2017 Guidelines addressing additional aspects of the NOx Technical Code 2008 with regard to particular requirements related to marine diesel engines with Selective Catalytic Reduction (SCR) systems (resolution MEPC.291(71), as amended by resolution MEPC.313(74))

Development of guidelines for SCR arrangements where more than one engine is connected to a common SCR system

PPR 12 considered the certification procedure and relevant technical issues on applying a common SCR system to more than one engine. However, as there was no demand for developing guideline among Member States, it was agreed that development would proceed if the demand for such guidelines arises in the future.

Amendments to the SCR Guidelines



PPR 12 discussed about amending the 2017 SCR guideline (Res.MEPC.291(71) as amended by Res.MEPC.313(74)) to remove ambiguities and ensure consistent application and finalized the amendment to the SCR guidelines following;

<Clarification of requirements for SCR NOx measurement device>

The existing SCR guideline provides unclear requirements for SCR incorporated with NOx measurement device. Therefore, it was recommended to use CLD or HCLD type sensors in accordance with the Appendix 3 of the NOx Technical Code. However, the NOx measurement device may be used if the allowance is within the 5 % during the test bed measurement between the NOx analyzer (CLD or HCLD type in accordance with the Appendix 3 of NOx Technical Code) and the NOx measurement device. The engine manufacturer (or NOx certification applicant) shall provide information on calibration requirements for the measurement

devices, along with the certification and management procedures.

<Clarification of requirements for Spot Check>

The load condition for Spot Checks (75% for propulsion engines, 50% or more for non-propulsion engines) was clarified and additional requirements for the Spot Check procedure were included. As a result, the engine manufacturer (or applicant) shall provide detailed information on the NOx measurement device, calibration requirements, test condition, test report templates, sensor installation location, test procedures, record-keeping methods, and criteria for assessing catalyst NOx reduction efficiency.

<Additional requirements for survey related to the Parameter Check Method>

For SCR not incorporated with NOx measurement device, the engine manufacturer (or applicant) shall provide detailed information on the correlation between engine load and reductant consumption. This is required to ensure that the reductant is appropriate. During the periodical survey, this can be replaced by verifying the Reductant Delivery Notes, which include information on reductant composition and quality. The NOx Technical File shall include proposals for maintaining such records.

During PPR 12, it was discussed that the amendment to the guideline is not subject to retroactive application. Therefore, the application date will be determined in MEPC 82.

Review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book

MEPC 78 agreed, in principle, that forced evaporation should be acceptable as a means for the disposal of oily bilge water, considering that the concept of managing water in oily residues through the process of evaporation is already an accepted practice for managing water in the oil residue sludge system and can be an effective means of reducing the water content in the oily bilge water system. MEPC invited proposals for amendment to MARPOL Annex I to PPR to appropriately reflect this understanding.

PPR considered amendments to the IBTS Guidelines, MARPOL Annex I, IOPP certificate, and the Oil Record Book regarding the treatment of oily bilge water using forced evaporation. However, due to insufficient submitted documents and time constraints, The Sub-Committee subsequently agreed to forward the matter to PPR 13 for further consideration and to request MEPC 83 to extend the target completion year of this agenda item to 2026.

Revision of MARPOL Annex IV and associated guidelines

Discussion on revision of MARPOL Annex IV and associated guidelines

The discussion on revision of MARPOL Annex IV and associated guidelines began in 2019, focusing on addressing the issue noting that most of Sewage Treatment Plant (STP) installed on ships do not meet the Type Approval standards for sewage effluent discharge. The aim is to ensure that STP maintain proper performance and contribute to marine environmental protection.

<Key points of discussion on revision of MARPOL Annex IV and associated guidelines>
① Amendment of requirement for Type Approval Guidelines for STP
② Introduction of new commissioning (test after installation) and performance test procedures for STP
③ Introduction of Sewage Management Plan and Sewage Record Book
④ Application of requirement for indicative monitoring for STP

PPR agreed that the revision of MARPOL Annex IV and associated guidelines aims for adoption at the MEPC in 2028/29

Establishment of Correspondence Group for revision of MARPOL Annex IV and associated guidelines

PPR 12 agreed to include the development of a draft 'Guidance to voluntarily obtain the data related to the quality of effluent' as scope of the work to establish standards for Type Approval and Performance Test of STP. Additionally, PPR 12 requested the finalization of the revision of MARPOL Annex IV and guidelines related to the Sewage Record Book and Sewage Management Plan, to be submitted to PPR 13.

Discussion on Whether or not the requirements of performance tests and indicative monitoring should be applied to existing installations

PPR 12 discussed whether the requirements of performance tests and indicative monitoring should be retrospectively applied to existing STP installed on existing ships. While the Sub-Committee took into account the general principle that ships should not be unduly penalized, as well as technical challenges, it agreed to consider the application of requirements for performance tests and indicative monitoring to existing STPs at a later stage, when the draft revised MARPOL Annex IV and associated guidelines were closer to completion.

Follow-up work emanating from the Action Plan to address marine plastic litter from ships

Review of the Action Plan to address Marine Plastic Litter form ships

In 2018, MEPC adopted "Action plan to address marine plastic litter from ship" (Res.MEPC.310(73)). PPR 12 reviewed this action plan and amended it by reflecting the latest information. As a result, the existing 30 actions were consolidated into 19 and the amended action plan will be submitted to MEPC with a view to adoption in MEPC 83.

<Major amendments>

① Amendment of the text regarding the management of fishing gear and measures for preventing the accidental loss of fishing gear
② Reduction of shipping's contribution to marine plastic litter
③ Improvement of the effectiveness of port reception and facilities and treatment in reducing marine plastic litter
④ Strengthened international cooperation

Reduction of the environmental risk associated with the maritime transport of plastic pellets

The 2021 M/V X-Press Pearl incident highlighted the issue of plastic pellet spills at sea. In response, PPR 11 developed the "Recommendations for the Transport of Plastic Pellets in Packaging Containers" (MEPC.1/Circ.909), which was adopted by MEPC 82.

In PPR 12, various measures were considered for introducing mandatory regulations on the maritime transport of plastic pellets in freight containers. These included designating plastic pellets as dangerous goods under the IMDG Code or amending MARPOL Annex III to strengthen regulations. However, PPR 12 decided that further detailed review and sufficient information were needed, and thus, the discussion was deferred to PPR 13.

Reporting of fishing gear that has been lost or discharged from a ship

PPR 12 considered the mandatory measures of management and reporting of fishing gear loss in light of action plan to address plastic litter form ships. PPR 12 decided the list of mandatory/voluntary reporting data of loss of fishing gear following;

- Mandatory data : Length and type of fishing vessel, position of loss, weather, measures taken by fishing vessel, kind of fishing gear, details of loss, quantity of loss.
- Voluntary data : Ship name, IMO number, Time, Reason for loss, identification marks of lost fishing gear

PPR 12 decided to further discuss issues regarding the additional data to be reported in PPR 13.

Unified interpretation of provisions of IMO environment-related conventions

Proposal for Unified interpretation of MARPOL Annex VI Reg.12.3.2.

In PPR 12, cases were identified where equipment using non-ozone depleting substances was charged with ozone depleting substances, and discussions were held to consider such instances.

China, which proposed the unified interpretation, identified cases during Port States Control inspections where vessels built after 2020 had installed equipment using non-ozone depleting substances, but the equipment was found to contain HCFCs (Hydrochlorofluorocarbons), which are ozone depleting substances. However, the existing regulations prohibit the installation of equipment containing ozone-depleting substances based on the ship's construction date, but there is no specific regulation prohibiting the use of ozone-depleting substances in such equipment. Therefore, China proposed a unified interpretation to establish a clear regulatory basis.

While most Member States agreed with the purpose and significance of this proposal, it was also agreed that such ambiguous matters under the MARPOL convention should be regulated through amendments to the convention rather than through a unified interpretation. Therefore, PPR 12 requested the interested Member States to propose an amendment to regulation 12 of MARPOL Annex VI as a new output to MEPC, to prohibit the use of ozone depleting substances by charging into equipment using non-ozone depleting substances.

Any other business

Amendment to the 2023 Guidelines for the Development of the Invention of Hazardous Materials

PPR discussed the amendment to the 2023 Guidelines for the Development of the Invention of Hazardous Materials (Res.MEPC.379(80)), as instructed by MEPC 82.

Within the Guidelines for the Development of the 2023 List of Hazardous Materials, an additional limit of 200 mg/kg for Cybutryne was added to Annex 1, based on the weight of wet paints. Additionally, a limit of 200 mg/kg for the threshold value of wet paint was added to Table A of Annex 6.

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