

SUB-COMMITTEE ON POLLUTION
PREVENTION AND RESPONSE
7th session
Agenda item 22

PPR 7/22
24 April 2020
Original: ENGLISH

REPORT TO THE MARINE ENVIRONMENT PROTECTION COMMITTEE

Section		Page
1	GENERAL	5
2	DECISIONS OF OTHER IMO BODIES	6
3	SAFETY AND POLLUTION HAZARDS OF CHEMICALS AND PREPARATION OF CONSEQUENTIAL AMENDMENTS TO THE IBC CODE	6
4	REVISED GUIDANCE ON BALLAST WATER SAMPLING AND ANALYSIS	13
5	REVISED GUIDANCE ON METHODOLOGIES THAT MAY BE USED FOR ENUMERATING VIABLE ORGANISMS	15
6	AMENDMENT OF ANNEX 1 TO THE AFS CONVENTION TO INCLUDE CONTROLS ON CYBUTRYNE, AND CONSEQUENTIAL REVISION OF RELEVANT GUIDELINES	16
7	REVIEW OF THE 2011 GUIDELINES FOR THE CONTROL AND MANAGEMENT OF SHIPS' BIOFOULING TO MINIMIZE THE TRANSFER OF INVASIVE AQUATIC SPECIES (RESOLUTION MEPC.207(62))	20
8	REDUCTION OF THE IMPACT ON THE ARCTIC OF BLACK CARBON EMISSIONS FROM INTERNATIONAL SHIPPING	23
9	DEVELOPMENT OF GUIDELINES FOR ONBOARD SAMPLING OF FUEL OIL NOT IN USE BY THE SHIP	28
10	STANDARDS FOR SHIPBOARD GASIFICATION OF WASTE SYSTEMS AND ASSOCIATED AMENDMENTS TO REGULATION 16 OF MARPOL ANNEX VI	30
11	REVIEW OF THE 2015 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS (RESOLUTION MEPC.259(68))	30

12	EVALUATION AND HARMONIZATION OF RULES AND GUIDANCE ON THE DISCHARGE OF LIQUID EFFLUENTS FROM EGCS INTO WATERS, INCLUDING CONDITIONS AND AREAS	34
13	DEVELOPMENT OF AMENDMENTS TO MARPOL ANNEX VI AND THE NO _x TECHNICAL CODE ON THE USE OF MULTIPLE ENGINE OPERATIONAL PROFILES FOR A MARINE DIESEL ENGINE	39
14	DEVELOPMENT OF MEASURES TO REDUCE RISKS OF USE AND CARRIAGE OF HEAVY FUEL OIL AS FUEL BY SHIPS IN ARCTIC WATERS	41
15	REVIEW OF THE IBTS GUIDELINES AND AMENDMENTS TO THE IOPP CERTIFICATE AND OIL RECORD BOOK	47
16	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	49
17	FOLLOW-UP WORK EMANATING FROM THE ACTION PLAN TO ADDRESS MARINE PLASTIC LITTER FROM SHIPS	52
18	UNIFIED INTERPRETATION TO PROVISIONS OF IMO ENVIRONMENT-RELATED CONVENTIONS	56
19	BIENNIAL AGENDA AND PROVISIONAL AGENDA FOR PPR 8	58
20	ELECTION OF CHAIR AND VICE-CHAIR FOR 2021	59
21	ANY OTHER BUSINESS	60
22	ACTION REQUESTED OF THE COMMITTEES	66

LIST OF ANNEXES

ANNEX 1	DRAFT REVISED MSC-MEPC.5/CIRC.7 ON GUIDANCE ON THE TIMING OF REPLACEMENT OF EXISTING CERTIFICATES BY REVISED CERTIFICATES AS A CONSEQUENCE OF THE ENTRY INTO FORCE OF AMENDMENTS TO CHAPTERS 17 AND 18 OF THE IBC CODE
ANNEX 2	DRAFT PPR.1 CIRCULAR ON REVISED CARRIAGE REQUIREMENTS FOR METHYL ACRYLATE AND METHYL METHACRYLATE
ANNEX 3	DRAFT PPR.1 CIRCULAR ON RE-SUBMISSION OF PRODUCTS LISTED IN LISTS 2 AND 3 OF THE MEPC.2/CIRCULAR ON PROVISIONAL CATEGORIZATION OF LIQUID SUBSTANCES IN ACCORDANCE WITH MARPOL ANNEX II AND THE IBC CODE
ANNEX 4	PROVISIONAL AGENDA FOR ESPH 26

-
- ANNEX 5 DRAFT AMENDMENTS TO THE GUIDANCE ON BALLAST WATER SAMPLING AND ANALYSIS FOR TRIAL USE IN ACCORDANCE WITH THE BWM CONVENTION AND GUIDELINES (G2) (BWM.2/CIRC.42/REV.1)
- ANNEX 6 REPORT OF THE TECHNICAL GROUP ON AMENDMENTS TO THE AFS CONVENTION
- ANNEX 7 DRAFT OPERATIVE PARAGRAPHS TO BE INCLUDED IN THE REQUISITE DRAFT RESOLUTION ON ADOPTION OF AMENDMENTS TO THE AFS CONVENTION
- ANNEX 8 DRAFT MEPC CIRCULAR ON GUIDELINES FOR ONBOARD SAMPLING OF FUEL OIL INTENDED TO BE USED OR CARRIED FOR USE ON BOARD A SHIP
- ANNEX 9 DRAFT MEPC RESOLUTION ON THE 2020 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS
- ANNEX 10 DRAFT REVISED MEPC CIRCULAR ON GUIDANCE ON INDICATION OF ONGOING COMPLIANCE IN THE CASE OF THE FAILURE OF A SINGLE MONITORING INSTRUMENT, AND RECOMMENDED ACTIONS TO TAKE IF THE EXHAUST GAS CLEANING SYSTEM (EGCS) FAILS TO MEET THE PROVISIONS OF THE EGCS GUIDELINES
- ANNEX 11 DRAFT SCOPE OF WORK FOR EVALUATION AND HARMONIZATION OF RULES AND GUIDANCE ON THE DISCHARGE OF DISCHARGE WATER FROM EGCS INTO THE AQUATIC ENVIRONMENT, INCLUDING CONDITIONS AND AREAS
- ANNEX 12 DRAFT AMENDMENTS TO MARPOL ANNEX I (PROHIBITION ON THE USE AND CARRIAGE FOR USE AS FUEL OF HEAVY FUEL OIL BY SHIPS IN ARCTIC WATERS)
- ANNEX 13 DRAFT MEPC CIRCULAR ON THE 2020 GUIDELINES FOR SYSTEMS FOR HANDLING OILY WASTES IN MACHINERY SPACES OF SHIPS INCORPORATING GUIDANCE NOTES FOR AN INTEGRATED BILGE WATER TREATMENT SYSTEM (IBTS)
- ANNEX 14 DRAFT AMENDMENTS TO MARPOL ANNEX I (AMENDMENTS TO APPENDIX II (FORM OF THE IOPP CERTIFICATE AND SUPPLEMENTS) AND APPENDIX III (FORM OF OIL RECORD BOOK))
- ANNEX 15 DRAFT REVISED MEPC CIRCULAR ON GUIDANCE FOR THE RECORDING OF OPERATIONS IN THE OIL RECORD BOOK PART I – MACHINERY SPACE OPERATIONS (ALL SHIPS)
- ANNEX 16 DRAFT MEPC CIRCULAR ON PROVISION OF ADEQUATE FACILITIES AT PORTS AND TERMINALS FOR THE RECEPTION OF PLASTIC WASTE FROM SHIPS
- ANNEX 17 DRAFT MEPC CIRCULAR ON SHARING OF RESULTS FROM RESEARCH ON MARINE LITTER AND ENCOURAGING STUDIES TO BETTER UNDERSTAND MICROPLASTICS FROM SHIPS

- ANNEX 18 DRAFT MEPC CIRCULAR ON UNIFIED INTERPRETATIONS TO THE NO_x TECHNICAL CODE 2008, AS AMENDED
- ANNEX 19 BIENNIAL STATUS REPORT 2020-2021
- ANNEX 20 PROPOSED PROVISIONAL AGENDA FOR PPR 8
- ANNEX 21 DRAFT REVISED BWM CIRCULAR ON GUIDANCE FOR THE COMMISSIONING TESTING OF BALLAST WATER MANAGEMENT SYSTEMS
- ANNEX 22 STATEMENTS BY DELEGATIONS AND OBSERVERS

1 GENERAL

1.1 The Sub-Committee on Pollution Prevention and Response (PPR) held its seventh session from 17 to 21 February 2020, chaired by Dr. Flavio da Costa Fernandes (Brazil). The Vice-Chair, Dr. Anita Mäkinen (Finland), was also present.

1.2 The session was attended by delegations from Member Governments and an Associate Member of IMO; and observers from international organizations and non-governmental organizations in consultative status, as listed in document PPR 7/INF.1.

Opening address

1.3 The Secretary-General welcomed participants and delivered his opening address, the full text of which can be downloaded from the IMO website at the following link: <http://www.imo.org/en/MediaCentre/SecretaryGeneral/Secretary-GeneralsSpeechesToMeetings/Pages/PPR-7-opening.aspx>

Chair's remarks

1.4 In responding, the Chair thanked the Secretary-General for his words of guidance and encouragement and assured him that his advice and requests would be given every consideration in the deliberations of the Sub-Committee.

Coronavirus COVID-19

1.5 The Sub-Committee noted, with appreciation, an update by the IMO Medical Adviser, Dr. Vikram Bhatt, regarding the latest developments and advice in relation to the coronavirus COVID-19. The Sub-Committee also noted that Circular Letter No.4203/Add.1 and Circular Letter No.4204, providing important information and guidance for delegates and seafarers, based on recommendations developed by the World Health Organization, on the precautions to be taken to minimize risks from the coronavirus, had been issued and were available on IMODOCS.

1.6 Many delegations joined the Secretary-General in expressing sympathy and condolences to those who had fallen victim to the spread of the coronavirus COVID-19, as well as voicing their support to the Government of China and its citizens for their tremendous efforts in tackling and preventing the spread of the virus.

1.7 In this context, the delegation of Japan, supported by the Bahamas, Singapore and others, made a statement outlining the difficulties faced by ships in fulfilling their obligations under MARPOL and other IMO conventions due to the coronavirus outbreak, informing the Sub-Committee that Japan had decided to take contingency measures such as providing flexibility to the period of statutory surveys and validity of certificates, and inviting other Member Governments to consider taking such actions as appropriate. The full text of the statement by the delegation of Japan is set out in annex 22. Similarly, the delegation of Greece made a statement that is also set out in annex 22.

1.8 The delegation of China, in expressing gratitude for the support and assistance provided by many countries and international organizations, reiterated the firm determination of the Chinese Government to win the fight over the coronavirus. The delegation of China called for full implementation of the guidance contained in the circular letters mentioned in paragraph 1.5 and urged Member States to make further efforts to minimize the disruption to the shipping industry caused by the outbreak of the coronavirus.

1.9 The Secretary-General encouraged Member States to further consider the matter of the statutory surveys and certification as discussed above and take any necessary action, as appropriate. The Secretary General also gave his assurance that the IMO Secretariat would consider this issue further and consult relevant stakeholders, with a view to providing additional advice and assistance to Member States in this regard.

Adoption of the agenda and related matters

1.10 The Sub-Committee adopted the agenda (PPR 7/1) and agreed to be guided in its work, in general, by the annotations contained in documents PPR 7/1/1 (Secretariat) and the proposed arrangements for the session set out in document PPR 7/1/2 (Chair).

2 DECISIONS OF OTHER IMO BODIES

The Sub-Committee noted the outcome of MEPC 74, MSC 101, III 6, SDC 6 and FAL 43 relevant to its work, as reported in documents PPR 7/2, PPR 7/2/1, PPR 7/2/2 and PPR 7/2/3 (Secretariat), respectively, and took appropriate action under the relevant agenda items.

3 SAFETY AND POLLUTION HAZARDS OF CHEMICALS AND PREPARATION OF CONSEQUENTIAL AMENDMENTS TO THE IBC CODE

Report of ESPH 25 and related documents

3.1 Having recalled that ESPH 25 had taken place from 14 to 18 October 2019, the Sub-Committee considered the report of ESPH 25 (PPR 7/3), together with related documents submitted to this session, and took action as outlined in paragraphs 3.2 to 3.27.

Outcome of GESAMP/EHS 56

3.2 The Sub-Committee noted the outcome of the discussions of GESAMP/EHS 56, particularly the finalization of the revised GESAMP Reports and Studies No.64, which had been published as GESAMP Reports and Studies No.102 (available for download at: <http://www.gesamp.org/publications/gesamp-hazard-evaluation-procedure-for-chemicals-carried-by-ships-2019>).

3.3 In this connection, the Sub-Committee noted that GESAMP Reports and Studies No.102 included new elements, such as the recommended cut-off values to be used when assessing mixtures containing components with a long-term health effect, a new table on flammability hazard ratings that would be included in the reassigned column E1 in the GESAMP Composite List, and a sub-categorization of column C3 (inhalation toxicity) to provide a more realistic hazard profile for the purposes of risk management.

3.4 Having noted that, as a consequence of the refinement of column C3 and the reassignment of column E1, it was necessary for appendix 1 to MARPOL Annex II to be amended, the Sub-Committee invited the Secretariat to prepare the necessary amendments and submit them to MEPC 76, with a view to approval and subsequent adoption.

Replacement of existing Certificates of Fitness following the entry into force of the revised IBC Code

3.5 The Sub-Committee recalled that, following the adoption of amendments to the IBC Code, MEPC 74 had noted that a revision of circular MSC-MEPC.5/Circ.7 on *Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code* might be required to ensure consistent implementation of the amendments and had referred the matter to ESPH 25 for further consideration.

3.6 In this regard, the Sub-Committee agreed to the draft revised MSC-MEPC.5/Circ.7 prepared by ESPH 25, as set out in annex 1, for subsequent approval by MEPC 75 and MSC 102.

Evaluation of products and cleaning additives

3.7 With regard to the provisional categorization of liquid substances, the Sub-Committee:

- .1 concurred with the evaluation of products and noted their respective inclusion in lists 1, 3 and 5 of MEPC.2/Circ.25, with validity for all countries and with no expiry date;
- .2 concurred with the evaluation of cleaning additives and noted their inclusion in annex 10 to MEPC.2/Circ.25;
- .3 noted the amendments and deletions, from the MEPC.2/Circular, of products that had reached their expiry dates or were no longer being shipped; and
- .4 noted that MEPC.2/Circ.25 had been published on 1 December 2019.

3.8 In this context, the Sub-Committee had for its consideration document PPR 7/3/3 (United Kingdom) proposing that the ESPH Working Group further consider documents ESPH 25/3/13 and ESPH 25/3/14 (United Kingdom) and assign carriage requirements to the trade-named mixtures SCAL16359A and CORR11413A, respectively, with validity for all countries and without an expiry date, following the agreement of ESPH 25 that substances in list 5 of the MEPC.2/Circular could be included in the "contains name" if they presented the greatest pollution and/or safety hazard.

3.9 Having considered the above document, the Sub-Committee instructed the ESPH Working Group to consider documents ESPH 25/3/13 and ESPH 25/3/14 and to assign carriage requirements to the above-mentioned two trade-named mixtures, as appropriate.

Renamed entries for drilling brines in the revised chapter 17 of the IBC Code

3.10 The Sub-Committee recalled that PPR 5 had agreed to rename two existing entries for drilling brines that were listed in chapter 17 of the IBC Code. Specifically, in the revised chapter 17 of the IBC Code, "Drilling brines, including: calcium bromide solution, calcium chloride solution and sodium chloride solution" was renamed as "Drilling brines (containing calcium bromide)" and "Drilling brines (containing zinc salts)" was renamed as "Drilling brines (containing zinc chloride)" to better reflect the nature of the products that had been assessed by the GESAMP/EHS Working Group.

3.11 In this context, the Sub-Committee noted that:

- .1 the GESAMP Composite List (PPR.1/Circ.6, annex 6) did not contain entries for sodium chloride, calcium chloride or zinc salts other than zinc chloride; and
- .2 the two entries for drilling brines in the 2019 amendments to the IBC Code (resolutions MEPC.318(74) and MSC.460(101)) no longer encompassed drilling brines that included sodium chloride, calcium chloride or zinc salts other than zinc chloride.

3.12 The Sub-Committee therefore reiterated its invitation to industry and relevant stakeholders to submit data to GESAMP/EHS for drilling brines containing calcium chloride, sodium chloride or zinc salts other than zinc chloride, as appropriate.

Complex mixtures submitted for assessment as MARPOL Annex II products

3.13 The Sub-Committee noted that, at the request of the reporting country (Belgium), ESPH 25 had re-evaluated the trade-named mixtures SOLVESSO 150, SOLVESSO 150 ND, SOLVESSO 200 and SOLVESSO 200 ND and, on the basis of the criteria set out in section 9 of the *Revised guidelines for the provisional assessment of liquid substances transported in bulk* (MEPC.1/Circ.512/Rev.1), had determined that they could be transported under MARPOL Annex I. Consequently, the four aforementioned mixtures had been deleted from list 3 of the MEPC.2/Circular.

3.14 Recognizing that such products could be used as components in mixture calculations, the Sub-Committee requested the GESAMP EHS Working Group to retain, in the GESAMP Composite List, the GESAMP Hazard Profiles corresponding to EHS entries 2423 (Alkylbenzenes mixture (containing less than 1% naphthalene)), 2424 (Alkylbenzenes mixtures (containing naphthalene)), 2425 (Alkyl naphthalenes, crude (containing less than 1% naphthalene)) and 2426 (Alkyl naphthalenes, crude (containing naphthalene)), and to reintroduce the GESAMP Hazard Profiles corresponding to the energy-rich fuels previously listed as EHS entries 2510 (Alkanes (C4-C12) linear, branched and cyclic (containing benzene up to 1%)), 2464 (Alkanes (C5-C7), linear and branched), 2511 (Alkanes (C9-C24) linear, branched and cyclic), 2463 (Alkanes (C10-C17), linear and branched) and 2392 (Alkanes (C10-C26), linear and branched).

Draft amendments to the Decisions with regard to the categorization and classification of products (PPR.1/Circ.7) and modifications to annex 5 to the MEPC.2/Circular

3.15 The Sub-Committee noted the deliberations of ESPH 25 regarding the use of the "contains name" in trade-named mixtures and the draft amendments to the *Decisions with regard to the categorization and classification of products* (PPR.1/Circ.7), as set out in annex 4 to document PPR 7/3, to record that list 5 entries could be used in the "contains name".

3.16 In this connection, the Sub-Committee endorsed the change of title of annex 5 to the MEPC.2/Circular to "Substances only used as components in trade-named mixtures" and agreed that the GESAMP Hazard Profiles in list 5 should be deleted and replaced by the relevant component factors and Pollution Categories for the substances, while retaining the corresponding ship types. The Sub-Committee noted that these changes to the MEPC.2/Circular would be reflected in MEPC.2/Circ.26, which was due to be issued on 1 December 2020.

3.17 In this context, the Sub-Committee noted a comment from the delegation of China in relation to paragraph 2 of the draft amendments to PPR.1/Circ.7, the *Decisions with regard to the categorization and classification of products* (PPR 7/3, annex 4) and the proposed decision to assign Pollution Category X to all mixtures that contain MARPOL Annex I components forming more than 1% by weight of the total mixture.

3.18 Specifically, the delegation of China highlighted that, when performing a mixture calculation and assigning component factors using the GESAMP Hazard Profiles for EHS entries 2423, 2424, 2425, 2426, mineral oil or when using the component factor for unassessed components, the resulting Pollution Category would not necessarily result in a Pollution Category X. It was therefore suggested that GESAMP should assess petroleum products and assign GESAMP Hazard Profiles to them so that they can be used in mixture calculations in order to ensure a consistent approach when assessing such mixtures.

3.19 In this regard, the Sub-Committee instructed the ESPH Working Group to consider the above intervention and advise the Sub-Committee accordingly.

Review of products in lists 2 and 3 of the MEPC.2/Circular

3.20 The Sub-Committee recalled that PPR 6 had authorized ESPH 25 to further consider the option of assigning an expiry date to all products in lists 2 and 4 of the MEPC.2/Circular and on products in list 3 with validity for all countries, with a view to advising the Sub-Committee on how the review of the products in the above-mentioned lists could be implemented to ensure that the carriage requirements reflected the most up-to-date GHPs, IBC Code criteria and associated guidance.

3.21 The Sub-Committee noted the progress of ESPH 25 in this regard, and invited Administrations to communicate with manufacturers and request that they provide information, to be passed on to the ESPH Working Group, on whether their products in the above-mentioned lists were still being shipped, with a view to removing products that were no longer being shipped from the MEPC.2/Circular.

3.22 In this context, the Sub-Committee had for its consideration document PPR 7/3/4 (United Kingdom), proposing a draft PPR.1 circular on re-submission of products in lists 2 and 3 of the MEPC.2/Circular.

3.23 In this context, the Sub-Committee noted the information in document PPR 7/INF.17 (Secretariat) regarding products whose GESAMP Hazard Profiles had been amended since the adoption of the 2004 amendments to the IBC Code (resolutions MEPC.119(52) and MSC.176(79)), products that had newly been assigned a safety (S) hazard rating in the 2019 amendments to the IBC Code, and products assigned to list 2 of the MEPC.2/Circular that have a component with a safety hazard in the "contains name".

3.24 Having considered the above documents, the Sub-Committee instructed the ESPH Working Group to further consider how the review of products in lists 2 and 3 of the MEPC.2/Circular could be implemented, taking into account document PPR 7/3/4 and the information in document PPR 7/INF.17, with a view to advising the Sub-Committee on how best to proceed.

Revision of MEPC.1/Circ.590

3.25 The Sub-Committee recalled that at PPR 6 it had concurred with the decision of the ESPH Working Group regarding the need for a revision of the *Revised tank cleaning additives guidance note and reporting form* (MEPC.1/Circ.590) and had invited Member States to submit proposals to ESPH 25. In this respect, the Sub-Committee noted the progress of ESPH 25 with regard to the revision of MEPC.1/Circ.590.

Provisional agenda for ESPH 26

3.26 Having recalled that MEPC 74 had approved the holding of an intersessional meeting of the ESPH Working Group in 2020, which had subsequently been endorsed by C 122, the Sub-Committee approved the provisional agenda for ESPH 26, subject to any possible revisions/additions made by the ESPH Working Group at this session.

3.27 The Sub-Committee acknowledged the importance of the work being carried out by the ESPH Working Group and that the issues associated with the safe transport of chemicals in bulk were very complex. The Sub-Committee recalled that the Group had a long-standing association with the BLG Sub-Committee and presently with the PPR Sub-Committee. In this connection, general support was noted for the Group to continue meeting twice a year, taking into account the heavy workload that lay ahead if all the products in the MEPC.2/Circular were going to be assessed.

Implementation of products listed in list 1 of the MEPC.2/Circular

3.28 The Sub-Committee had for its consideration document PPR 7/3/1 (United States) containing a draft MEPC circular on clarification on the implementation of products listed in list 1 of the MEPC.2/Circular, and proposing a way forward in order for the updated carriage requirements for products already listed in the IBC Code to be used once they had been reassessed with validity for all countries and without an expiry date.

3.29 Having considered the above document, the Sub-Committee instructed the ESPH Working Group to further consider the proposal in document PPR 7/3/1, as well as alternative ways of ensuring that the most accurate carriage requirements for reclassified products could be used as soon as possible after the inclusion in list 1 of the MEPC.2/Circular, with a view to advising the Sub-Committee accordingly.

Revised carriage requirements for methyl acrylate and methyl methacrylate

3.30 The Sub-Committee had for its consideration document PPR 7/3/2 (United Kingdom) proposing that a PPR circular be issued, containing revised carriage requirements for methyl acrylate and methyl methacrylate that include special requirements 16.6.1 and 16.6.2, which had been omitted in the 2019 amendments of the IBC Code, including wording to indicate that the revised carriage requirements included in the circular take precedence over those listed in the 2019 amendments to the IBC Code.

3.31 Following consideration, the Sub-Committee agreed to refer the document to the ESPH Working Group to further review the text and finalize the draft circular for approval at this session, with the view to subsequent endorsement by MEPC 75 as an urgent matter and subsequently by MSC 102.

Clarifications in relations to MEPC.1/Circ.886

3.32 The Sub-Committee recalled that MEPC 74 had instructed it to consider whether the entries listed in paragraph 5 of the *Guidance on the implementation of provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code related to paraffin-like products* (MEPC.1/Circ.886) should be kept on the ship's Certificate of Fitness or deleted.

3.33 Subsequently, the Sub-Committee instructed the ESPH Working Group to consider the request from MEPC 74 and advise it accordingly.

Draft IP Code

3.34 The Sub-Committee recalled that SDC 6, in considering the draft International Code of Safety for Ships Carrying Industrial Personnel (the draft IP Code), had agreed to refer sections 3.1.8.3 and 3.1.8.5 relating to dangerous liquid chemicals in bulk, as set out in annex 2 to document SDC 6/WP.4, to the PPR Sub-Committee for consideration.

3.35 In this regard, the Sub-Committee noted that the request by SDC 6 for the Sub-Committee to consider the two sections was no longer relevant, following the work carried out by SDC 7.

3.36 The Sub-Committee further noted that SDC 7 had recommended that the draft amendments to the goals, functional requirements and regulations for the carriage of dangerous goods in the draft IP Code be referred to ESPH 26, and that any comments and/or proposed modifications should be sent directly to SDC 8.

3.37 Having noted that PPR 8 had been scheduled to meet before SDC 8, the Sub-Committee agreed that ESPH 26 should consider the relevant sections of the draft IP Code, report to PPR 8 and the outcome of PPR 8 would be reported to SDC 8.

Establishment of the ESPH Working Group

3.38 Having considered the above-mentioned matters, the Sub-Committee established the Working Group on Evaluation of Safety and Pollution Hazards of Chemicals (ESPH) and instructed it, taking into account the comments and decisions made in plenary, to:

- .1 conduct an evaluation of new products based on the information contained in documents ESPH 25/3/13 and ESPH 25/3/14, taking into account document PPR 7/3/3;
- .2 conduct an evaluation of cleaning additives;
- .3 further develop the draft amendments to the *Decisions with regard to the categorization and classification of products* (PPR.1/Circ.7) with a view to finalization, using annex 4 to document PPR 7/3 as a basis, and taking into account decisions made during this session;
- .4 further consider document PPR 7/3/1 and advise the Sub-Committee on how best to proceed;
- .5 finalize a draft PPR circular on revised carriage requirements for Methyl acrylate and Methyl methacrylate to include special requirements 16.6.1 and 16.6.2 in column "o" of chapter 17 of the IBC Code, using document PPR 7/3/2 as a basis;
- .6 further consider how the review of products in lists 2 and 3 of the MEPC.2/Circular can be implemented, taking into account document PPR 7/3/4 and the information in document PPR 7/INF.17, and advise the Sub-Committee on how best to proceed;
- .7 progress the work on the revision of MEPC.1/Circ.590 and advise the Sub-Committee of any proposed substantive changes in the current arrangements for the evaluation of cleaning additives;
- .8 consider whether the entries listed in paragraph 5 of the *Guidance on the implementation of provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code related to paraffin-like products* (MEPC.1/Circ.886) should be kept on the ship's Certificate of Fitness or deleted, and advise the Sub-Committee accordingly; and
- .9 review the draft agenda for ESPH 26 and revise as appropriate, based on progress made during this session.

Report of the ESPH Working Group

3.39 Having considered the report of the ESPH Working Group (PPR 7/WP.3), the Sub-Committee approved it in general and took action as outlined in paragraphs 3.30 to 3.50.

Evaluation of products and cleaning additives

- 3.40 With regard to the provisional categorization of liquid substances, the Sub-Committee:
- .1 concurred with the evaluation products, as set out in annex 1 to document PPR 7/WP.3, and their inclusion in list 3 of the next revision of the MEPC.2/Circular (MEPC.2/Circ.26, to be issued in December 2020);
 - .2 agreed to request GESAMP/EHS 57 to provide advice on how to best assess mixtures against the criteria for the new MARPOL Annex II discharge requirement; and
 - .3 concurred with the evaluation of cleaning additives, as set out in annex 2 to document PPR 7/WP.3, and their inclusion in annex 10 of the next revision of the MEPC.2/Circular (MEPC.2/Circ.26).

Review of the MEPC.2/Circular

3.41 The Sub-Committee noted that the tripartite agreements for 16 products would reach their expiry dates in December 2020 and invited Member Governments to take action as appropriate, to avoid any delay in the carriage of these products beyond their expiry dates.

Clarification on the implementation of products in list 1 of the MEPC.2/Circular

3.42 With regard to existing products in chapter 17 and 18 of the IBC Code that had been reassessed and included in list 1 of the MEPC.2/Circular, the Sub-Committee agreed to a qualifier being added to the product name in list 1, to distinguish the reassessed product from the existing entry in the IBC Code, as being the best option to permit early shipment of such reassessed products.

Draft amendments to the Decisions with regard to the categorization and classification of products (PPR.1/Circ.7)

3.43 The Sub-Committee noted the progress made in preparing draft amendments to PPR.1/Circ.7 and that the new decisions included the use of list 5 entries in the contains name of a product and guidance on how to assess trade-named mixtures containing MARPOL Annex I components.

Revised carriage requirements for methyl acrylate and methyl methacrylate

3.44 The Sub-Committee agreed to the draft PPR.1/Circular on Revised carriage requirements for methyl acrylate and methyl methacrylate, as set out in annex 2, for subsequent endorsement by MEPC 75 and MSC 102. In this respect, the Sub-Committee noted the importance of using the correct carriage requirements when transporting these cargoes in order to avoid that potential sources of heat could initiate a polymerizing reaction in the cargoes.

3.45 In this context, the Sub-Committee also agreed that chapter 17 of the IBC Code should be amended to include:

- .1 the updated carriage requirements for methyl acrylate and methyl methacrylate, which contain special requirement 16.6.1 and 16.6.2; and

- .2 special requirement 16.2.7 in Pollution Category Y n.o.s. entries, to allow for the option of assigning that special requirement to list 2 products in the MEPC.2/Circular, when appropriate.

Review of products in lists 2 and 3 of the MEPC.2/Circular

3.46 The Sub-Committee agreed to the draft PPR.1 circular on Re-submission of products listed in lists 2 and 3 of the MEPC.2/Circular on Provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code, as set out in annex 3, for endorsement by MEPC 76.

3.47 In this connection, the Sub-Committee noted the deadline for evaluating the products would be 31 December 2025. The Sub-Committee also noted the Group's discussions with regard to the expected increase in workload associated with the review process and the importance of retaining two sessions of the Working Group per year (see also paragraph 3.27).

Revision MEPC.1/Circ.590

3.48 The Sub-Committee noted the Group's discussions with regard to the revision of MEPC.1/Circ.590 and that the work associated with the evaluation of cleaning additives could in future be carried out by the individual Administrations, which would thereafter report to IMO.

Clarification with regard to the carriage of paraffin-like products and listing in the certificate of fitness

3.49 The Sub-Committee endorsed the Group's view that the existing entries for the paraffin-like products listed in paragraph 5 of MEPC.1/Circ.886 could be retained on the ship's Certificate of Fitness, even if the renamed and reassessed products were listed in the addendum to the ship's Certificate, since the product names used in the IBC Code and in list 1 of the MEPC.2/Circular were different. The Sub-Committee agreed to convey the above as its recommendation to MEPC 76.

Provisional agenda for ESPH 26

3.50 Taking into account the Groups progress during the session, the Sub-Committee approved the provisional agenda for ESPH 26, as set out in annex 4, and agreed to request MEPC 75 to approve the scheduling of an intersessional meeting of the ESPH Technical Group in the second half of 2021.

4 REVISED GUIDANCE ON BALLAST WATER SAMPLING AND ANALYSIS

4.1 The Sub-Committee noted that the BWM Convention entered into force on 8 September 2017 and that the number of Contracting Governments was currently 83, representing 81.83% of the world's merchant fleet tonnage.

4.2 The Sub-Committee recalled that, following consideration of documents MEPC 74/4/10 (France) and MEPC 74/INF.17 (France), MEPC 74 had agreed to extend the target completion year for output 1.14 (Revised guidance on ballast water sampling and analysis) to 2021 and had referred these documents to this session for consideration.

4.3 The Sub-Committee also had for its consideration the following documents:

- .1 PPR 7/4 (France), proposing updates to the *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)* (BWM.2/Circ.42/Rev.1) with regard to the second-generation adenosine triphosphate (ATP) analytical method;
- .2 PPR 7/4/1 (France), proposing updates to BWM.2/Circ.42/Rev.1 with regard to the CV6 vital stain analytical method combined with membrane filtration and fluorescence detection in solid phase;
- .3 PPR 7/4/2 (Norway), proposing amendments to BWM.2/Circ.42/Rev.1 related to cultivation methods for the $\geq 50 \mu\text{m}$ and ≥ 10 to $< 50 \mu\text{m}$ size groups to reflect current knowledge and also ensure that this circular is in line with the *Guidance on methodologies that may be used for enumerating viable organisms for type approval of ballast water management systems* (BWM.2/Circ.61);
- .4 PPR 7/4/3 (Finland), providing information on a testing study of ballast water indicative analysis devices, which had been conducted in Finland and could be taken into account when considering the revision of BWM.2/Circ.42/Rev.1;
- .5 PPR 7/INF.4 (France), providing information on the second-generation adenosine triphosphate (ATP) analytical method; and
- .6 PPR 7/INF.5 (France), providing information on the CV6 vital stain analytical method combined with membrane filtration and fluorescence detection in solid phase.

4.4 Some concerns were expressed with regard to the fact that the ATP method counts total bacteria without distinguishing the three indicator microbes included in the D-2 standard. Following a brief discussion, the Sub-Committee referred the documents to the Technical Group on Amendments to the AFS Convention, established under agenda item 6 (see paragraph 6.18), for further consideration.

Instructions to the Technical Group on Amendments to the AFS Convention

4.5 The Sub-Committee instructed the Technical Group on Amendments to the AFS Convention, taking into account comments and decisions made in plenary, to prepare draft text for the revision of BWM.2/Circ.42/Rev.1, using documents PPR 7/4, PPR 7/4/1 and PPR 7/4/2 as the basis, and taking into account the information in documents PPR 7/4/3, PPR 7/INF.4 and PPR 7/INF.5.

Report of the Technical Group

4.6 Having considered the relevant parts of the report of the Technical Group (PPR 7/WP.4/Add.1, paragraphs 16 to 22 and annex 3), the Sub-Committee took action as described in paragraphs 4.7 and 4.8.

4.7 The Sub-Committee agreed to the draft amendments to the *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)*, as set out in annex 5, and invited MEPC 76 to approve them for inclusion in a revised circular to be disseminated as BWM.2/Circ.42/Rev.2.

Completion of the work on the output

4.8 The Sub-Committee invited the Committee to note that the work on output 1.14 (Revised guidance on ballast water sampling and analysis) had been completed.

5 REVISED GUIDANCE ON METHODOLOGIES THAT MAY BE USED FOR ENUMERATING VIABLE ORGANISMS

5.1 The Sub-Committee recalled that MEPC 74 had agreed to the request by PPR 6 to extend the target completion year for output 1.15 (Revised guidance on methodologies that may be used for enumerating viable organisms) to 2021 to take into consideration new analysis methods.

5.2 The Sub-Committee had for its consideration the following documents:

- .1 PPR 7/5 (Norway), proposing to amend the *Guidance on methodologies that may be used for enumerating viable organisms for type approval of ballast water management systems* (BWM.2/Circ.61) to update the existing method reference for the MPN+Motility method; and
- .2 PPR 7/INF.10 (Norway), providing supporting information on the update of the method reference for the MPN+Motility method.

5.3 Having noted support for the proposal by Norway, the Sub-Committee referred the documents to the Technical Group on Amendments to the AFS Convention, established under agenda item 6 (see paragraph 6.18), for further consideration.

5.4 The delegation of the United States stated that, while as a non-Party to the BWM Convention it had no disagreement with any decision, the lack of objection did not imply acceptability under current United States domestic regulations at this time.

5.5 The delegation of the Netherlands recalled its previous proposals for addition of the flow cytometry method in BWM.2/Circ.61 and advised the Sub-Committee that it expected to submit the requested further information to PPR 8 in line with this output's target completion year.

Instructions to the Technical Group on Amendments to the AFS Convention

5.6 The Sub-Committee instructed the Technical Group on Amendments to the AFS Convention, taking into account comments and decisions made in plenary, to prepare draft text for the revision of BWM.2/Circ.61, using document PPR 7/5 as the basis, and taking into account the information in document PPR 7/INF.10.

Report of the Technical Group

5.7 Having considered the relevant parts of the report of the Technical Group (PPR 7/WP.4/Add.1, paragraphs 23 to 25 and annex 4), the Sub-Committee agreed to the draft text for the revision of the *Guidance on methodologies that may be used for enumerating viable organisms for type approval of ballast water management systems*, as set out in annex 4 to document PPR 7/WP.4/Add.1, and kept this text in abeyance, for consolidation at PPR 8, with a view to approval at MEPC 77 and dissemination as BWM.2/Circ.61/Rev.1.

6 AMENDMENT OF ANNEX 1 TO THE AFS CONVENTION TO INCLUDE CONTROLS ON CYBUTRYNE, AND CONSEQUENTIAL REVISION OF RELEVANT GUIDELINES

6.1 The Sub-Committee noted that the AFS Convention had entered into force on 17 September 2008 and that the number of Contracting Governments was currently 89, representing 96.09% of the world's merchant fleet tonnage.

Matters related to the proposed amendments to Annex 1 to the AFS Convention

6.2 The Sub-Committee recalled that PPR 6 had agreed to the draft amendment to Annex 1 to the AFS Convention (Controls on anti-fouling systems) to include controls on cybutryne, set out in annex 1 to annex 8 to document PPR 6/20/Add.1, for consideration by MEPC 74, with a view to approval.

6.3 The Sub-Committee recalled also that, following consideration of the outcome of PPR 6 along with document MEPC 74/10/9 (Japan), MEPC 74 had, inter alia, agreed to:

- .1 refer the draft amendments to Annex 1 to the AFS Convention to this session for further consideration, including addressing the potential conflict between article 4(2) of the AFS Convention and the proposed amendments to Annex 1 set out in document MEPC 74/10/9, and for the outcome to be reported to MEPC 75 as an urgent matter. In this regard, the Committee had requested the Secretariat to provide possible legal advice to this session in relation to article 4(2) of the AFS Convention; and
- .2 invite Member States and international organizations to submit information to this session on the impact of the removal or sealing of existing anti-fouling systems utilizing cybutryne that had been applied to ships, taking into account the information in document MEPC 74/10/9.

6.4 The Sub-Committee had for its consideration the following documents:

- .1 PPR 7/6 (IPPIC), informing that sealer coats are commercially available from the coatings industry which prevent leaching of biocides, including cybutryne, from underlying coatings, and highlighting the *Revised Guidance on best management practices for removal of anti-fouling systems from ships, including TBT hull paints* (AFS.3/Circ.3/Rev.1);
- .2 PPR 7/6/1 (Secretariat), providing information and advice regarding proposed amendments to Annex 1 to the AFS Convention following the request from MEPC 74;
- .3 PPR 7/6/3 (Austria et al.), providing additional information requested by MEPC 74 in relation to the concerns expressed by document MEPC 74/10/9 and the impact of removal or sealing of existing anti-fouling systems containing cybutryne;
- .4 PPR 7/6/4 (Japan), providing information on a scientific investigation on the remaining amount of cybutryne in an anti-fouling system at the end of its service life and concluding that there would be almost no environmental benefit in requiring removal or sealer coatings for ships bearing an AFS containing cybutryne which is reaching or has passed the end of its service life; and

-
- .5 PPR 7/6/5 (Brazil et al.), providing comments on the draft amendment to Annex 1 to the AFS Convention (Controls on anti-fouling systems) to include controls on cybutryne, developed by PPR 6.

6.5 In the ensuing discussion, the Sub-Committee considered the various issues addressed in these documents, including procedural and legal interpretation matters as well as technical matters such as the management of existing anti-fouling systems containing cybutryne, with a view to agreeing on the way forward for the finalization of the amendments to Annex 1 to the AFS Convention.

6.6 A number of delegations supported the proposals in documents PPR 7/6/4 and PPR 7/6/5, and expressed the view that further consideration of the matter was required following provision of more information on the environmental impacts of cybutryne and the corresponding benefits from controlling its usage, which should be commensurate and proportionate. Some delegations also argued that the implementation of controls for existing anti-fouling systems containing cybutryne would be difficult for certain sectors such as ships of smaller sizes or operating domestically, which may not maintain comprehensive records of their anti-fouling systems.

6.7 Other delegations supported the views expressed in documents PPR 7/6 and PPR 7/6/3, and were of the view that, following the consideration of the comprehensive proposal to amend Annex 1 to the AFS Convention, PPR 6 had made an informed decision that should not be re-opened and the amendments should be finalized and agreed at this session. These delegations also expressed the view that sufficient information and assurances had been provided to alleviate the concerns expressed during MEPC 74, including the availability of sealer coats and of best practices for coating removal operations, and the ability of ships to implement the proposed controls within their normal dry-docking cycles.

6.8 Some delegations noted the legal advice contained in document PPR 7/6/1 and supported its further consideration in the Technical Group.

6.9 Considering the various views expressed, some delegations proposed that a compromise should be pursued, such as an exemption with a specified scope, which should be considered in the Technical Group.

6.10 Following consideration, the Sub-Committee agreed that the consideration of the comprehensive proposal to amend Annex 1 to the AFS Convention should not be re-opened and that the Technical Group should aim for compromise with a view to finalizing the amendments at this session, taking into account the views expressed in all the submitted documents. In this regard, the Sub-Committee agreed that this should entail the consideration of a potential exemption with a specified scope such as specific ship types or sizes, etc.

6.11 In conclusion, the Sub-Committee instructed the Technical Group on Amendments to the AFS Convention, taking into account comments and decisions made in plenary, to finalize the amendment to Annex 1 to the AFS Convention, using annex 1 to annex 8 to document PPR 6/20/Add.1 as the basis and taking into account documents PPR 7/6, PPR 7/6/1, PPR 7/6/3, PPR 7/6/4 and PPR 7/6/5.

Consequential matters related to the proposed amendments to Annex 4 to the AFS Convention

6.12 The Sub-Committee recalled that PPR 6 had agreed to the draft amendment to the model form of the International Anti-fouling System Certificate (IAFSC), set out in annex 2 to annex 8 to document PPR 6/20/Add.1, for consideration by MEPC 74, with a view to approval.

6.13 The Sub-Committee recalled also that PPR 6 had noted that, in accordance with regulation 2(3) of Annex 4 to the AFS Convention, for ships bearing an anti-fouling system controlled under Annex 1 that was applied before the date of entry into force of a control for such a system, the Administration shall issue a Certificate not later than 2 years after entry into force of that control; and had agreed that this matter should be further considered at MEPC 74.

6.14 Having recalled that MEPC 74 had, inter alia, deferred consideration of the draft amendments to the IAFSC, the Sub-Committee considered document PPR 7/6/2 (IACS), proposing that an operative paragraph be included in the draft resolution adopting the amendments to the AFS Convention with regard to issuance of the new IAFSC.

6.15 In the ensuing discussion, the majority of the delegations who spoke supported the further consideration of the proposal contained in document PPR 7/6/2 by the Technical Group.

6.16 Following discussion, the Sub-Committee agreed to instruct the Technical Group, taking into account comments and decisions made in plenary, to finalize the draft operative paragraph to be included in the draft resolution adopting the amendments to the AFS Convention with regard to issuance of the new IAFSC, using document PPR 7/6/2, paragraph 12, as the basis.

6.17 In addition, the Sub-Committee noted that the model form of the IAFSC might be affected by the other developments under this agenda item at this session and agreed to instruct the Technical Group to consider the need for any further amendment to Annex 4 to the AFS Convention and, if required, prepare it using annex 2 to annex 8 to document PPR 6/20/Add.1 as the basis.

Establishment of the Technical Group on Amendments to the AFS Convention

6.18 The Sub-Committee established the Technical Group on Amendments to the AFS Convention and instructed it, taking into account comments and decisions made in plenary, to:

- .1 finalize the draft amendment to Annex 1 to the AFS Convention, using annex 1 to annex 8 to document PPR 6/20/Add.1 as the basis and taking into account documents PPR 7/6, PPR 7/6/1, PPR 7/6/3, PPR 7/6/4 and PPR 7/6/5;
- .2 finalize the draft operative paragraph to be included in the draft resolution adopting the amendments to the AFS Convention with regard to issuance of the new IAFSC, using paragraph 12 of document PPR 7/6/2 as the basis;
- .3 consider the need for any further amendment to Annex 4 to the AFS Convention and, if required, prepare it using annex 2 to annex 8 to document PPR 6/20/Add.1 as the basis; and
- .4 review action items .13, .15 and .16 of the actions requested of the Committee by PPR 6 and, if required, amend them as appropriate, taking into account that MEPC 74 had deferred their consideration.

Report of the Technical Group

6.19 Having considered the report of the Technical Group (PPR 7/WP.4), the Sub-Committee approved the report in general and took action as described in paragraphs 6.20 to 6.31.

Matters related to the proposed amendments to Annex 1 to the AFS Convention

6.20 Recalling that it was a requirement of the AFS Convention, in accordance with article 6(5), that the Technical Group's report be circulated to the Parties, Members of the Organization, the United Nations and its specialized agencies, intergovernmental organizations having agreements with the Organization and non-governmental organizations in consultative status with the Organization, prior to its consideration by the Committee, the Sub-Committee agreed that this requirement could be satisfied by attaching the Group's report as an annex to the final report of the Sub-Committee, and instructed the Secretariat to do so when preparing the final report. The Group's report is set out in annex 6.

6.21 The delegation of the United States, while not objecting to the proposed controls on cybutryne prepared by the Technical Group, expressed concern that the exemptions could undermine the precautionary approach of the AFS Convention and questioned whether the legal concerns presented in document PPR 7/6/1 would also apply to the ships being proposed for exemption. In addition, the United States urged caution with any future amendments and recommended that they be as protective as possible so as to be in line with the precautionary approach that is the basis of the AFS Convention.

6.22 The Sub-Committee agreed to the draft amendment to Annex 1 (Controls on anti-fouling systems) to the AFS Convention to include controls on cybutryne, as set out in annex 1 to annex 6, for consideration by MEPC 75, with a view to resolving the effective dates currently in square brackets and subsequent approval.

Consequential matters related to the proposed amendments to Annex 4 to the AFS Convention

6.23 In considering the draft operative paragraphs with regard to issuance of the new IAFSC, set out in annex 2 to annex 6, the Sub-Committee agreed with the following modifications proposed by the observer from IACS:

- .1 in the first line of the first draft operative paragraph, the text "that are affected" is replaced by "that are confirmed to be affected"; and
- .2 in the third line of the second draft operative paragraph, the text "that are not affected" is replaced by "that are confirmed not to be affected".

6.24 Subsequently, the Sub-Committee agreed to the draft operative paragraphs, as set out in annex 7, and requested the Secretariat to include them in the draft requisite MEPC resolution adopting the amendments to the AFS Convention

6.25 The Sub-Committee also agreed to the draft amendments to Annex 4 (Surveys and certification requirements for anti-fouling systems) to the AFS Convention, including the draft amendments to the model form of the International Anti-fouling System Certificate, as set out in annex 3 to annex 6, for consideration by MEPC 75, with a view to approval.

Actions deferred from MEPC 74

6.26 The Sub-Committee invited the Committee to encourage Member States to conduct baseline studies prior to the entry into force of controls on cybutryne, in order to allow the subsequent determination of the effectiveness of these controls.

6.27 The Sub-Committee also invited the Committee to request the governing bodies of the London Convention and Protocol, at their next meeting, to consider a revision of the *Revised guidance on best management practices for removal of anti-fouling coatings from ships, including TBT hull paints* (LC-LP.1/Circ.31/Rev.1), in light of the introduction of controls of cybutryne under the AFS Convention.

6.28 The Sub-Committee further invited the Committee to note the need to consider an update to the list of items to be listed in the Inventory of Hazardous Materials under the Hong Kong Convention to include cybutryne when the respective controls enter into force.

Extension of the output

6.29 The Sub-Committee recommended to the Committee that the target completion year of the output on "Amendment of Annex 1 to the AFS Convention to include controls on cybutryne, and consequential revision of relevant guidelines" be extended to 2022 and the output renamed as "Revision of guidelines associated with the AFS Convention as a consequence of the introduction of controls on cybutryne".

6.30 In addition, the Sub-Committee invited proposals to PPR 8 on amendments to the Guidelines for brief sampling, survey and certification, and inspection of anti-fouling systems on ships (resolutions MEPC.104(49), MEPC.195(61) and MEPC.208(62), respectively), taking into account the issues raised in paragraphs 31 to 36 of document PPR 6/WP.4.

6.31 Furthermore, the Sub-Committee invited interested Member States and international organizations to submit proposals to PPR 8 on the establishment of a correspondence group on the revision of the guidelines associated with the AFS Convention.

7 REVIEW OF THE 2011 GUIDELINES FOR THE CONTROL AND MANAGEMENT OF SHIPS' BIOFOULING TO MINIMIZE THE TRANSFER OF INVASIVE AQUATIC SPECIES (RESOLUTION MEPC.207(62))

7.1 The Sub-Committee recalled that MEPC 72 had included a new output on "Review of the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species (resolution MEPC.207(62))" in the post-biennial agenda of the Committee, assigning the PPR Sub-Committee as the associated organ, with two sessions needed to complete the work.

7.2 The Sub-Committee recalled also that PPR 6 had included the output in its biennial agenda for the 2020-2021 biennium and in the provisional agenda of PPR 7, both of which were subsequently approved by MEPC 74.

7.3 The Sub-Committee further recalled that MEPC 73 had referred to it, for further consideration under this output, documents MEPC 73/18/1 and MEPC 73/INF.12 (Islamic Republic of Iran), which proposed the development of comprehensive regulations on biofouling management in order to fully address the issue of the transfer of invasive aquatic species (IAS).

- 7.4 The Sub-Committee also had for its consideration the following documents:
- .1 PPR 7/7 (ICES), containing recommendations on actions to minimize biofouling introductions by the urgent implementation of the Biofouling Guidelines and the associated Guidance for recreational craft (MEPC.1/Circ.792);
 - .2 PPR 7/7/1 (BIMCO), reporting on the results of a survey asking shipowners about their biofouling and in-water cleaning management, including the use of anti-fouling systems, biofouling management plans and record books, in-water inspections and cleaning, and consideration of different local regulations;
 - .3 PPR 7/7/2 (Australia et al.), outlining the findings of a survey based on the *Guidance for evaluating the 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species* (MEPC.1/Circ.811) and proposing to consider areas for potential revision of the Guidelines based on the findings of this survey;
 - .4 PPR 7/7/3 (New Zealand), providing key findings from an assessment of the uptake and implementation of the Biofouling Guidelines, presenting findings from an informal survey conducted with external stakeholders, and proposing to consider areas for potential revision of the Guidelines based on the findings of this assessment and survey;
 - .5 PPR 7/7/4 (Australia et al.), summarizing key elements and intentions for the review of the Biofouling Guidelines, and proposing to agree to key elements for revision and to establish a correspondence group that would assess the effectiveness of the Guidelines and develop recommendations on how to address issues relating to the identified key elements for revision;
 - .6 PPR 7/INF.2 (ICES), providing references to inform additional actions to evaluate and minimize biofouling introductions;
 - .7 PPR 7/INF.3 (Australia et al.), providing information for consideration in the review of the Biofouling Guidelines that has been provided by various Member States, observers and shipping companies; and
 - .8 PPR 7/INF.7 (Australia and Netherlands), providing information on biofouling management for recreational craft.

7.5 In the ensuing discussion, all delegations who spoke supported the establishment of a correspondence group. Some delegations proposed that the correspondence group should have clear and unambiguous terms of reference and that its work should be aimed at improving both the content and the uptake of the Biofouling Guidelines.

7.6 Several delegations highlighted the importance of in-water cleaning for biofouling management and the impediments to its uptake due to a combination of reasons including the lack of relevant facilities and global standards, which should be addressed as part of the review of the Guidelines. Other topics highlighted in this context included niche areas and inspection procedures. Some delegations also recognized the importance of the GloFouling Partnerships project and its potential contribution to the advancement of biofouling management practices.

7.7 With regard to documents MEPC 73/18/1 and MEPC 73/INF.12, some delegations expressed the view that they were outside the scope of this output as they proposed the development of mandatory requirements for biofouling management whereas the scope of the

output included only an assessment of the Guidelines and how they could be improved. However, the Sub-Committee agreed that there could still be pertinent information in these documents that could be considered in the context of the review of the Guidelines.

7.8 In light of the above, the Sub-Committee agreed to refer all the documents to the Technical Group on Amendments to the AFS Convention, established under agenda item 6 (see paragraph 6.18), for further consideration.

Instructions to the Technical Group on Amendments to the AFS Convention

7.9 The Sub-Committee instructed the Technical Group on Amendments to the AFS Convention, taking into account comments and decisions made in plenary, to:

- .1 identify key elements in the Biofouling Guidelines that require further attention and discussion, and consider corresponding areas for potential revision of the Guidelines, taking into account documents PPR 7/7, PPR 7/7/1, PPR 7/7/2, PPR 7/7/3, PPR 7/7/4, PPR 7/INF.2, PPR 7/INF.3, PPR 7/INF.7, MEPC 73/18/1 and MEPC 73/INF.12; and
- .2 prepare draft terms of reference for a correspondence group on the review of the Biofouling Guidelines, using paragraph 12 of document PPR 7/7/4 as the basis.

Report of the Technical Group

7.10 Having considered the relevant parts of the report of the Technical Group (PPR 7/WP.4/Add.1, paragraphs 4 to 15 and annexes 1 and 2), the Sub-Committee took action as described in paragraphs 7.11 to 7.13.

7.11 The Sub-Committee agreed to the identified key elements of the Biofouling Guidelines that require further attention and discussion, and the corresponding areas for potential revision of the Guidelines, set out in annex 1 to document PPR 7/WP.4/Add.1.

7.12 The Sub-Committee also established the Correspondence Group on Review of the Biofouling Guidelines, under the coordination of Norway,¹ with the following terms of reference:

- .1 assess the effectiveness of the Guidelines in their current form as measures to minimize the risk of transferring invasive aquatic species from ships' biofouling, including assessment of the uptake and implementation of the Guidelines;
- .2 review the Guidelines considering best practices, available technologies and techniques to practically control biofouling, and available research and development;

1

Coordinator:

Mr. Sveinung Oftedal
Specialist Director
Department for Marine Management and Pollution Control
Norwegian Ministry of Climate and Environment
Postboks 8013 Dep, NO-0030 Oslo, Norway
Mobile: +47 92 89 95 84
Email: Biofouling@kld.dep.no

- .3 develop recommendations for the Sub-Committee on how to address issues relating to the key elements of the Guidelines for revision as identified by PPR 7, as appropriate, based on technical analysis and the review conducted under term of reference .2, to facilitate an increase in uptake and effectiveness of the Guidelines; and
- .4 submit a report to PPR 8.

7.13 The Sub-Committee further encouraged interested Member States and international organizations to contact the Coordinator of the correspondence group, with a view to participating and contributing to the work of that group, including the provision of information on best practices.

8 REDUCTION OF THE IMPACT ON THE ARCTIC OF BLACK CARBON EMISSIONS FROM INTERNATIONAL SHIPPING

8.1 The Sub-Committee recalled that PPR 6 had agreed that its work under the output on "Consideration of the impact on the Arctic of emissions of Black Carbon from international shipping" had been completed in accordance with the terms of reference given by MEPC 62.

8.2 The Sub-Committee also recalled that when MEPC 74 had considered the options for further work on the reduction of the impact on the Arctic of Black Carbon emissions from international shipping, it had noted that the overwhelming majority supported, in principle, the draft terms of reference as set out in paragraph 5 of document MEPC 74/10/8 (Finland et al.), which were subsequently referred to PPR 7 for further consideration, with a view to advising the Committee accordingly.

8.3 In this connection, the Sub-Committee had for its consideration the following documents:

- .1 PPR 7/8 and Corr.1 (Finland and Germany), presenting initial results of a measurement campaign indicating that new blends of marine fuels with 0.50% m/m sulphur content can contain a high percentage of aromatic compounds, resulting in increased Black Carbon emissions compared to heavy fuel oil (HFO) and distillates; and proposing that ISO should review the ISO 8217 petroleum products standard to include additional specifications, such as the aromatic content or the hydrogen/carbon (H/C) ratio;
- .2 PPR 7/8/1 (EUROMOT), providing further information on Black Carbon measurement methods already considered and studied (FSN and PAS); proposing that ISO be invited to include the aromatic content and the Estimated Cetane Number (ECN) of marine fuels when deriving the final updated marine fuel standard from ISO/PAS 23263:2019; and proposing also that the ECN be included in the parameter list of liquid fuels in section 3.3 of the *Reporting protocol for voluntary measurement studies to collect Black Carbon data* set out in annex 6 to document PPR 5/24;
- .3 PPR 7/8/2 (FOEI et al.), providing comments with regard to the implications for the Arctic of the study presented by document PPR 7/8 and calling on IMO to mandate an urgent switch to distillates for ships operating in the Arctic to avoid a sharp rise in emissions of short-lived climate forcers in this vulnerable area; and

- .4 PPR 7/8/3 (FOEI et al.), providing comments in response to the study presented by document PPR 7/8, reflecting on the implications of the results of that study for shipping's contribution to the climate crisis and calling on IMO to introduce regulations to stop the use of blended low-sulphur residual fuels designed to meet the 0.50% m/m global sulphur limit.

8.4 The Sub-Committee noted the information provided in the following documents:

- .1 PPR 7/INF.15 (Canada et al), providing a summary of the outcomes of the Sixth ICCT Workshop on Marine Black Carbon Emissions, which had taken place from 18 to 19 September 2019 in Helsinki, Finland, and focused on identifying appropriate Black Carbon control policies to reduce the impact on the Arctic of Black Carbon emissions from international shipping; and
- .2 PPR 7/INF.20 (FOEI et al.), providing key findings of the Intergovernmental Panel on Climate Change (IPCC) Special Report on the Ocean and Cryosphere in a Changing Climate with respect to observed physical changes in the Arctic, observed impacts on people and ecosystem services, changes to Arctic transportation and tourism and the environmental consequences of increased Arctic transportation and tourism.

8.5 During the consideration of the documents listed above, the Sub-Committee was informed, inter alia, by ISO that early analysis of Very Low Sulphur Fuel Oils (VLSFOs) supplied to ships in January 2020, when compared with High Sulphur Fuel Oils (HSFOs), illustrated the more paraffinic nature of VLSFOs than most of the HSFOs. Therefore, the ignition/combustion performance of VLSFOs was expected to be improved and that, as a result, Black Carbon emissions of VLSFOs would be lower. ISO was already in the process of, and will continue to, monitor the VLSFO/HSFO properties and provide feedback on their performance. The full statement by the representative of ISO is set out in the annex 22.

8.6 The Sub-Committee noted a statement by the observer from IMarEST as set out in annex 22.

8.7 In the ensuing discussion, the following views were, inter alia, expressed:

- .1 it was important to address Black Carbon, as it was recognized as a short-term climate pollutant, which on a 20-year timescale represented 21% of shipping's climate impact;
- .2 there was insufficient scientific evidence of any linkage between emissions of Black Carbon from ships in the Arctic area and climate change;
- .3 a significant volume of voluntary research had already been carried out and it showed that the formation of Black Carbon from marine diesel engines depended upon many interrelated processes including the use of fuel oil, the type and nature of the engine and fuel oil feed system, the characteristics of the engine, the way it was operated including engine load and the ambient conditions;
- .4 it was widely recognized that burning highly aromatic fuels in four-stroke engines increased Black Carbon emissions; however, it could not be assumed that the conclusions would be the same with other engine types burning compliant fuels under the new sulphur regulation;

- .5 while aromatic content was a factor, establishing the exact reasons for the formation of Black Carbon from combustion processes was complex and depended on a multitude of factors;
- .6 in some cases, emissions of Black Carbon were not significantly impacted by the aromatic content; there was no simple connection between Black Carbon emissions and fuel type;
- .7 FSN and PAS were recognized to be good measurement methods for the determination of Black Carbon emissions from marine diesel engines;
- .8 MEPC 73 agreed that the three methods (FSN, PAS and LII) were appropriate for data collection and that further work was required before any of the recommended Black Carbon measurement methods, including FSN, could be used to regulate, or otherwise directly control Black Carbon emissions from marine engines or ships;
- .9 there was a lack of technical information on the application of the LII method; therefore, further studies focusing on the correlation between LII results and FSN and PAS results would be needed before any decision was taken regarding LII;
- .10 a standardized sampling, conditioning and measurement protocol, including a traceable reference method and an uncertainty analysis, was required to make accurate and comparable measurement of Black Carbon emissions; therefore any instrument showing that it could measure Black Carbon and satisfy the performance criteria set in such a standardized method should be accepted;
- .11 FSN had been showed to be suitable for the determination of Black Carbon emissions from marine diesel engines and a good correlation between measurements with FSN and PAS could be verified;
- .12 as only 2 months had passed since the 0.50% m/m sulphur limit under MARPOL Annex VI had gone into effect, and many different new fuel formulations had come on the market, including blended fuels; suppliers were still developing products, and therefore it was unknown what the formulation of VLSFOs would look like in the long-term;
- .13 it was necessary to conduct a study to establish the relationship between reduced levels of sulphur content and a high content of aromatic compounds in fuel oils;
- .14 action should be taken to ensure that new fuels compliant with the global sulphur limit of 0.50% m/m did not lead to an increase in Black Carbon emissions from international shipping in the Arctic;
- .15 additional studies were needed to better understand new VLSFOs, their composition and chemistry and their potential impact on Black Carbon emissions;
- .16 it was necessary to investigate Black Carbon emission levels from large two-stroke engines in addition to the four-stroke diesel engines, using VLSFOs introduced since 1 January 2020;

- .17 it was necessary to compare Black Carbon emissions from fuels used after 1 January 2020 to those before 2020;
- .18 it was necessary to investigate the feasibility of identifying an indicator to determine the aromatic compound of marine fuel oils and the identification of the presence of other chemical compounds in the composition of marine fuels that effect soot emissions, taking into account the preservation of qualitative indicators using real fuel oil samples present on the market;
- .19 the Organization should invite ISO to take into consideration the results of the available studies in order to address the reduction of Black Carbon emissions from petroleum-based marine fuels;
- .20 the Organization should invite ISO to report back on their consideration of potential proxies, including aromatic content, estimated cetane number (ECN), and the H/C ratio – which had been shown to be an important indicator of Black Carbon emissions in other sectors such as aviation and land transport – taking into account the oxygen content;
- .21 ISO should be requested to consider the incorporation in ISO 8217 of either the aromatic content or the hydrogen/carbon (H/C) ratio as a trace for the aromatic content;
- .22 the Organization should carefully consider the potential disadvantages of reducing the aromatic content of fuel oils used by ships (e.g. with regard to stability and cold flow properties);
- .23 it was unclear why additional parameters would need to be included in ISO 8217, especially as the Calculated Carbon Aromaticity Index (CCAI) was already available;
- .24 as specifications of ISO 8217 were relevant globally and not only in the Arctic, considering additional specifications in a global ISO standard would not fall under the scope of this agenda item;
- .25 the experts participating in the revision of the ISO 8217 standard were well placed to assess the most effective parameters and associated test methods to determine aromatic content and combustion behaviour;
- .26 regulating the aromatic content of marine fuel oil would be a bad proxy for reducing the impact of Black Carbon emissions on the Arctic;
- .27 a switch to distillates for ships operating in the Arctic was one of the expert recommendations arising from the Black Carbon workshop reported in document PPR 7/INF.15; it would reduce Black Carbon emissions from ships by 30% to 40%, and it would not require Black Carbon to be measured to demonstrate compliance;
- .28 in the interim, the Sub-Committee should recommend the adoption of an MEPC resolution encouraging the voluntary switch to distillates for ships operating in or near the Arctic, until more was known, noting that the Polar Code already encouraged ships to apply regulation 43 of MARPOL Annex I when operating in Arctic waters;

-
- .29 a switch to distillate fuels could be supported, however practically it would be excessive to check the aromatic content of marine fuel oils;
 - .30 it would be inappropriate to call for mandatory fuel switching to distillates before having a better understanding of whether or not new VLSFOs had higher aromatic content than HFO and more data should be obtained on the aromatic content of pre-2020 and post-2020 marine fuel oils;
 - .31 a ban on VLSFO blends without evidence-based data would be counterproductive and go beyond the mandate of this Sub-Committee;
 - .32 the Organization should continue its work on this agenda item with a view to finalizing the development of measures addressing Black Carbon emissions from ships trading in sensitive areas such as the Arctic;
 - .33 the draft terms of reference suggested in document MEPC 74/10/8 should be supported;
 - .34 as time allocated was very limited in this Sub-Committee, a correspondence group should be established to work on items 2 and 3 of the draft terms of reference proposed in document MEPC 74/10/8; additionally, Member States and international organizations should be invited to submit proposals on the first item of the draft terms of reference and furthermore on the results of research projects on the aromatic content of fuel oils and similar projects;
 - .35 while the establishment of a correspondence group could be supported, the threat of Black Carbon emissions was serious enough to warrant this issue being referred to the Committee as an urgent matter, with a view to agreeing and developing a measure during MEPC 75 and MEPC 76;
 - .36 if a correspondence group was established, its terms of reference should not pre-empt any decision regarding policy options; and
 - .37 for the next meetings of the Sub-Committee, more time should be allocated to discuss this important agenda item in order to finalize the task given by the Committee.

8.8 Following discussion, the Sub-Committee noted that Black Carbon emissions from international shipping depended on many factors, inter alia, type of engine, fuel formulation, engine load, and engine maintenance, that more information was required on the composition of the fuel oils compliant with the 0.50% m/m sulphur limit under MARPOL Annex VI, and that more research could be necessary.

8.9 The Sub-Committee further noted that ISO would consider if it was possible to add a further measure to what was already included in the ISO 8217 standard with a view to providing an approximate indication as to whether a fuel oil was more aromatic or more paraffinic, and requested ISO to provide an update to PPR 8 on the matter.

Further consideration of the draft terms of reference on reducing the impact on the Arctic of Black Carbon emissions from international shipping

8.10 The Sub-Committee recalled that MEPC 74 had noted that action considered in respect of reducing the impact on the Arctic of Black Carbon emissions from international shipping could include non-mandatory instruments such as guidance, and on that basis the Sub-Committee agreed to the draft terms of reference set out in paragraph 5 of document MEPC 74/10/8, which read as follows:

- .1 consider regulating or otherwise directly control Black Carbon emissions from marine diesel engines (exhaust gas) to reduce the impact on the Arctic of Black Carbon emissions from international shipping, taking into account the identified candidate control measures (PPR 6/20/Add.1, annex 9);
- .2 further consider the recommended Black Carbon measurement methods (FSN, PAS, LII) to be used in conjunction with regulations to control Black Carbon emissions from marine diesel engines;
- .3 develop a standardized sampling, conditioning and measurement protocol, including a traceable reference method and an uncertainty analysis, taking into account the three most appropriate Black Carbon measurement methods (FSN, PAS, LII), to make accurate and traceable (comparable) measurements of Black Carbon emissions. This measurement system should not preclude consideration and agreement on policy options to avoid or otherwise limit Black Carbon emissions from ships, as its development would in fact benefit from guidance on how possible regulations would be applied; and
- .4 submit a report to MEPC 77 in 2021.

8.11 The Sub-Committee invited Member Governments and international organizations to submit further concrete proposals to PPR 8 on the preferred way forward.

Establishment of a correspondence group

8.12 Following discussion, the Sub-Committee established the Correspondence Group on Reduction of the impact on the Arctic of Black Carbon emissions from international shipping, under the coordination of Canada,² with the following terms of reference:

- .1 advance the development of a standardized sampling, conditioning, and measurement protocol, including a traceable reference method and an uncertainty analysis, taking into account the three most appropriate Black Carbon measurement methods (FSN, PAS, LII), to make accurate and traceable (comparable) measurements of Black Carbon emissions;
- .2 investigate the linkages between the measurement systems and policy options; and
- .3 submit a report to PPR 8.

9 DEVELOPMENT OF GUIDELINES FOR ONBOARD SAMPLING OF FUEL OIL NOT IN USE BY THE SHIP

9.1 The Sub-Committee recalled that MEPC 74 had noted the recommendation of PPR 6 that, as a consequence of draft amendments to regulation 14.8 of MARPOL Annex VI for introducing onboard sampling of fuel oil not in use by the ship, guidelines to support effective and safe implementation would need to be developed before the entry into force of the new requirements.

² **Coordinator:**
Miss Kerri Henry
Manager, International Air Emissions
Transport Canada
Email: kerri.henry@tc.gc.ca
Tel: +1-613-993-3541

9.2 The Sub-Committee also recalled that MEPC 74, following consideration of document MEPC 74/10/2 (IMarEST) proposing draft Guidelines for onboard sampling for the verification of the sulphur content of the fuel oil carried for use on board a ship, had forwarded the document to PPR 7 to further consider and prepare the new guidelines.

9.3 During the consideration of document MEPC 74/10/2, the Sub-Committee noted general support for the finalization of the draft guidelines to facilitate both consistent onboard sampling and the enforcement of the prohibition on the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship, pursuant to the amended regulation 14.1 of MARPOL Annex VI, due to enter into force on 1 March 2020.

9.4 The Sub-Committee noted an intervention by the observer from BIMCO, supported by others, expressing concerns about possible safety implications when using the manhole to access bunker tanks for sampling purposes and about the representativeness of the on board fuel oil samples when drawn from the sounding pipe or fuel oil transfer pump. In this regard, the Sub-Committee instructed the Working Group to consider these issues further in the process of finalizing the draft Guidelines. As requested, the full text of the statement made by the observer from BIMCO is set out in annex 22.

Establishment of the Working Group on Prevention of Air Pollution from Ships

9.5 Subsequently, the Sub-Committee established the Working Group on Prevention of Air Pollution from Ships, and instructed it, taking into consideration the comments and decisions made in plenary, to finalize the draft Guidelines for onboard sampling for the verification of the sulphur content of the fuel oil carried for use on board a ship, using the annex to document MEPC 74/10/2 as the basis.

Report of the Working Group on Prevention of Air Pollution from Ships

9.6 Having considered the relevant parts of the report of the Working Group on Prevention of Air Pollution from Ships (PPR 7/WP.5, paragraphs 4 to 11 and annex 2), the Sub-Committee approved the report in general and took action as described in paragraphs 9.7 to 9.9.

9.7 Having noted that the Working Group had expressed concerns on the regulatory gap between in use and onboard fuel oil sampling, as foreseen in regulation 14.8 of MARPOL Annex VI, and the possible use of those samples for checking the ship's compliance with regulation 14.1 of MARPOL Annex VI in accordance with the procedure set out in appendix 6 to MARPOL Annex VI, the Sub-Committee also noted the possible need for procedural guidance to be developed by the Organization to address that issue.

9.8 Subsequently, the Sub-Committee agreed to the draft MEPC circular on Guidelines for on board sampling of fuel oil intended to be used or carried for use on board a ship, as set out in annex 8, with a view to approval at MEPC 75.

Completion of the work on the output

9.9 The Sub-Committee invited the Committee to note that the work on this output had been completed.

10 STANDARDS FOR SHIPBOARD GASIFICATION OF WASTE SYSTEMS AND ASSOCIATED AMENDMENTS TO REGULATION 16 OF MARPOL ANNEX VI

10.1 The Sub-Committee recalled that PPR 6:

- .1 having considered the report of the Correspondence Group on Standards for Shipboard Gasification of Waste Systems and Associated Amendments to Regulation 16 of MARPOL Annex VI (PPR 6/10 and PPR 6/INF.10), noted that the draft standards for shipboard gasification of waste systems had not yet been developed to a point where they could be presented as a draft IMO instrument; and
- .2 invited interested Member Governments and international organizations to submit concrete proposals for draft standards for shipboard gasification of waste systems to PPR 7.

10.2 The Sub-Committee had for its consideration documents PPR 7/10 and PPR 7/INF.12 (Panama), proposing a Standard specification or Guidelines for thermal waste treatment devices and providing the full text of the draft Standard specification/Guidelines which had been developed in accordance with the recommendations provided in the report of the Correspondence Group established by PPR 5.

10.3 Owing to time constraints, the Sub-Committee agreed to defer the consideration of documents PPR 7/10 and PPR 7/INF.12 to PPR 8. The Sub-Committee also noted Panama's intention to resubmit the draft Standard specification/Guidelines for thermal waste treatment devices to PPR 8, along with any modifications that might be introduced in the interim, by the deadline for bulky documents, to provide sufficient time for interested Member Governments and international organizations to review them and prepare comments if necessary.

Extension of the target completion year

10.4 Subsequently, the Sub-Committee invited MEPC 75 to extend the target completion year for the output to 2021.

11 REVIEW OF THE 2015 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS (RESOLUTION MEPC.259(68))

11.1 The Sub-Committee recalled that PPR 6 had considered the report of the Correspondence Group on Exhaust Gas Cleaning Systems, established by PPR 5 and coordinated by Finland (PPR 6/11, PPR 6/11/Add.1, PPR 6/INF.2, PPR 6/INF.3, PPR 6/INF.4 and PPR 6/INF.5), and had agreed on the following issues that the Correspondence Group had been unable to resolve:

- .1 that the words "shall be carried" be replaced by the words "should be carried" in the section of the Form of the SO_x Emission Compliance Certificate (SECC) referring to a copy of the Certificate being carried on board the ship; and
- .2 that the draft revised 2015 Guidelines for exhaust gas cleaning systems (EGCS) be prepared as a new set of guidelines that would only apply to new installations fitted after a specific date, and existing EGCS approved in accordance with the *2015 Guidelines for exhaust gas cleaning systems* (MEPC.259(68)) (2015 EGCS Guidelines) would not need to be approved again.

11.2 The Sub-Committee also recalled that at its previous session, in light of the heavy workload of the Working Group on Prevention of Air Pollution from Ships, it had agreed that all documents considered at PPR 6 under the output on "Review of the *2015 Guidelines for exhaust gas cleaning systems* (resolution MEPC.259(68))" would be further considered at PPR 7 in conjunction with any additional documents submitted to PPR 7 by interested Member Governments and international organizations.

11.3 Consequently, the Sub-Committee had for its consideration the following documents that had been deferred by PPR 6:

- .1 PPR 6/11 (Finland), providing part 1 of the report of the Correspondence Group and covering proposals for amendments to the 2015 EGCS Guidelines;
- .2 PPR 6/11/Add.1 (Finland), providing part 2 of the report of the Correspondence Group and covering the proposals for amendments to the *2009 Guidelines for port State control under the revised MARPOL Annex VI* (resolution MEPC.181(59));
- .3 PPR 6/11/1 (Secretariat), providing the advice by GESAMP regarding the proposals for amendments to the 2015 EGCS Guidelines that had been submitted to PPR 5;
- .4 PPR 6/11/2 (CESA), providing four possible options for consistent measurement of the concentration of oil in EGCS discharges which had been explored by the Exhaust Gas Cleaning Systems Association (EGCSA);
- .5 PPR 6/11/3 (United States) proposing changes to appendix 6 of the draft revised 2015 EGCS Guidelines, in order to more thoroughly address the following aspects: guidance on how to address and document EGCS malfunction; differentiation between what constitutes a short-term versus long-term failure of the EGCS; and additional guidance on perceived short-term emission exceedances for Scheme B systems that monitor the SO₂/CO₂ ratio;
- .6 PPR 6/11/4 (CESA), providing criteria for EGCS data inspection, the scope of the data to be supplied, and how the data should be displayed and potentially downloaded for viewing and compliance verification assessment, in the context of paragraph 7.5 of the draft revised 2015 EGCS Guidelines;
- .7 PPR 6/11/5 (IACS), proposing changes to the draft revised 2015 EGCS Guidelines with the aim of providing additional clarity, ensuring that environmental testing is carried out as part of the approval of the systems, and preventing the leakage of exhaust gases;
- .8 PPR 6/11/6 (CLIA), proposing changes to the draft revised 2015 EGCS Guidelines aimed at making the language used in appendices 3 and 6 of the draft Guidelines more specific;
- .9 PPR 6/INF.2, PPR 6/INF.3, PPR 6/INF.4 and PPR 6/INF.5 (Finland), containing the detailed comments made by the participants of the Correspondence Group during the five input rounds;

- .10 PPR 6/INF.20 (Germany), providing information on a German project on discharge water from EGCS during which a sampling campaign was carried out on several ships using EGCS in open and closed loop operation; and
- .11 MEPC 73/INF.5 (CESA) providing the results of a sampling campaign of washwater from EGCS on a series of ships and the subsequent analysis.

11.4 Having recalled that MEPC 74 had approved MEPC.1/Circ.883 on *Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the exhaust gas cleaning system (EGCS) fails to meet the provisions of the 2015 EGCS Guidelines (resolution MEPC.259(68))*, the Sub-Committee agreed that document PPR 6/11/3 and the comments in paragraph 8 of document PPR 6/11/6 had been superseded by the outcome of MEPC 74 and no longer required consideration by the Sub-Committee.

11.5 The Sub-Committee also recalled that MEPC 74 had adopted the *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* (resolution MEPC.321(74)), which incorporated provisions concerning EGCS based on the work of the Correspondence Group. Therefore, the Sub-Committee agreed that part 2 of the report of the Correspondence Group (PPR 6/11/Add.1) did not need further consideration.

11.6 With regard to documents PPR 6/INF.20 and MEPC 73/INF.5, the Sub-Committee agreed to consider them under agenda item 12.

11.7 The Sub-Committee considered the draft amendments to the 2015 EGCS Guidelines set out in annex 2 to document PPR 6/11, in particular the outstanding issues listed in paragraphs 99.3 to 99.10 of document PPR 6/11, as well as all other relevant documents forwarded by PPR 6.

11.8 In the ensuing discussion, one delegation expressed the view that there was not enough information to choose one of the four options for the consistent monitoring of oil in EGCS discharges as proposed in document PPR 6/11/2 (CESA), and therefore suggested to delete the definition of phenanthrene equivalence (PAH_{phe}) from the draft amendments to the 2015 EGCS Guidelines. Another delegation expressed the view that the measurement of polycyclic aromatic hydrocarbons (PAH) as a surrogate for oil was necessary to control the oil content of overboard discharges from EGCS.

11.9 With regard to documents submitted to this session, the Sub-Committee had for its consideration the following:

- .1 PPR 7/11 (InterManager), proposing modification of the sample analysis and preparation columns of the table in section 2.4 of appendix 3 of the draft amendments to the 2015 EGCS Guidelines (PPR 6/11, annex 2), in order to clearly indicate the relationships between different discharge water parameters and the recommended methods for sample preparation and analysis; and
- .2 PPR 7/11/1 (IACS), proposing the addition of text to the draft amendments to the 2015 EGCS Guidelines (PPR 6/11, annex 2), in order to clarify the expected contents of the Onboard Monitoring Manual (OMM) with respect to the survey requirements for monitoring systems used for continuous monitoring of Scheme B EGCS, and the meaning of the phrase "include EGCS operation" in paragraph 5.3.1.

11.10 With regard to the proposal in document PPR 7/11, following a brief discussion, the Sub-Committee noted support for the table proposed in document PPR 7/11 to be used in place of the table prepared by the Correspondence Group, while agreeing that it could be further reviewed and refined, as appropriate, by the Working Group.

11.11 During consideration of document PPR 7/11/1, some delegations expressed support for adding the proposed paragraphs to clarify the survey requirements for monitoring systems in the OMM, while other delegations expressed the opinion that the 2015 EGCS Guidelines were sufficiently clear.

11.12 Following discussion, the Sub-Committee agreed to refer document PPR 7/11/1 to the Working Group on Prevention of Air Pollution from Ships for further consideration.

Instructions to the Working Group on Prevention of Air Pollution from Ships

11.13 The Sub-Committee instructed the Working Group on Prevention of Air Pollution from Ships, established under agenda item 9 (see paragraph 9.5), taking into consideration the comments and decisions made in plenary, to finalize the draft amendments to the 2015 EGCS Guidelines, based on part 1 of the report of the Correspondence Group established by PPR 5 (PPR 6/11), in particular the outstanding issues mentioned in paragraphs 99.3 to 99.10 of document PPR 6/11, taking into account documents PPR 6/11/1, PPR 6/11/2, PPR 6/11/4, PPR 6/11/5, PPR 6/11/6, PPR 7/11 and PPR 7/11/1, and to review MEPC.1/Circ.883 as appropriate.

Report of the Working Group on Prevention of Air Pollution from Ships

11.14 Having considered the relevant parts of the report of the Working Group on Prevention of Air Pollution from Ships (PPR 7/WP.5, paragraphs 12 to 42 and annexes 2 and 3), the Sub-Committee took action as described in paragraphs 11.15 to 11.18.

11.15 The Sub-Committee noted that the Working Group had finalized the draft 2020 Guidelines for exhaust gas cleaning systems (2020 EGCS Guidelines). The Sub-Committee also noted that the Working Group had prepared a revision of MEPC.1/Circ.883 to make the guidance contained therein generally applicable to all versions of the EGCS Guidelines, including the 2020 EGCS Guidelines once adopted, rather than it being specific to the 2015 EGCS Guidelines.

11.16 In that regard, the delegation of Ireland expressed the view that the Working Group had extended the scope of application of MEPC.1/Circ.883 without carrying out a full review of the guidance but by merely replacing the reference to the 2015 EGCS Guidelines (resolution MEPC.259(69)) with "the EGCS Guidelines", and for that reason a future review of the revised circular would be needed. The delegation of Ireland further expressed the view that MEPC.1/Circ.883 had been issued as an interim guidance pending the finalization of the 2020 EGCS Guidelines, and that the guidance on ongoing compliance in the event of a malfunction of the EGCS should have been included as an appendix to the draft 2020 EGCS Guidelines. As requested, the full statement by the delegation of Ireland is set out in annex 22.

11.17 Following consideration and in the absence of any further objections to the approach taken by the Working Group, the Sub-Committee agreed to:

- .1 the draft MEPC resolution on the 2020 Guidelines for exhaust gas cleaning systems, as set out in annex 9, with a view to adoption by MEPC 75; and

- .2 the draft revised MEPC circular on Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the Exhaust Gas Cleaning System (EGCS) fails to meet the provisions of the EGCS Guidelines, as set out in annex 10, with a view to approval by MEPC 75 and dissemination as MEPC.1/Circ.883/Rev.1.

Completion of the work on the output

11.18 The Sub-Committee invited the Committee to note that the work on output 1.12 (Review of the 2015 Guidelines for exhaust gas cleaning systems (resolution MEPC.259(68))) had been completed.

12 EVALUATION AND HARMONIZATION OF RULES AND GUIDANCE ON THE DISCHARGE OF LIQUID EFFLUENTS FROM EGCS INTO WATERS, INCLUDING CONDITIONS AND AREAS

12.1 The Sub-Committee recalled that MEPC 74 had:

- .1 approved, in principle, a new output on "Evaluation and harmonization of rules and guidance on the discharge of liquid effluents from EGCS into waters, including conditions and areas" in the 2020-2021 biennial agenda of the PPR Sub-Committee and the provisional agenda for PPR 7, with a target completion year of 2021; and
- .2 referred documents MEPC 74/14/1 (Austria et al.), MEPC 74/14/7 (CLIA), MEPC 74/14/8 (CESA), MEPC 74/14/9 (China), MEPC 74/INF.10 (Panama), MEPC 74/INF.24 (Japan) and MEPC 74/INF.27 (CLIA) to PPR 7 for further consideration, with a view to refining the title and the scope of the output and advising MEPC 75 accordingly.

12.2 The Sub-Committee also recalled that, as requested by MEPC 74, the Secretariat had liaised with GESAMP and a GESAMP Task Team had been established to assess the available evidence relating to the environmental effects of discharge water from exhaust gas cleaning systems (EGCSs).

12.3 In this connection, the Sub-Committee had for its consideration the following documents submitted to this session:

- .1 PPR 7/12 (Austria et al.), outlining aspects for consideration by GESAMP and the Sub-Committee, contributing to the work towards the evaluation and harmonization of rules and guidance on discharge waters from EGCSs, including conditions and areas, and proposing questions pointing at knowledge-based areas where further clarification and scientific support is required in order to develop harmonized rules, given the availability of different studies and data on the impact of EGCS operation on the environment, in particular of discharge waters from open-loop mode operation, and the identified need to conclude on the required risk assessment framework;
- .2 PPR 7/12/1 (China et al.), identifying a range of factors that, according to the co-sponsors, should be taken into consideration when assessing the impact of washwater discharge from EGCSs operating in ports and coastal areas that have been considered, among others, by many authorities in identifying

the technical evidence and basis for determining local restrictions; and could be considered by other authorities when assessing the impact of EGCS discharges in the context of their unique circumstances;

- .3 PPR 7/12/2 (Chile), contending that it is necessary for EGCS residues and liquid effluent from open-loop or hybrid EGCSs to be controlled and further regulated in order to avoid the potential risks to the environment from discharges into the sea, and calling on the Sub-Committee to address these matters within the scope of the current output;
- .4 PPR 7/12/3 and PPR 7/12/3/Corr.1 (Japan), proposing some refinements to the title of the output, for clarification, based on the comments provided during the discussion at MEPC 74; that the scope of work should be the development of guidelines to provide recommended procedures for environmental impact assessments and criteria that Member States should follow when setting local or regional regulations on discharge of liquid effluents from EGCS into sensitive waters; and that the review of the global standard for EGCS prescribed in the *2015 Guidelines for Exhaust Gas Cleaning Systems* (MEPC.259(68)) should be out of scope since it was currently in a review process by the Sub-Committee under a distinct output, namely output 1.12 on "Review of the 2015 Guidelines for exhaust gas cleaning systems (resolution MEPC.259(68))" of this Sub-Committee;
- .5 PPR 7/12/4 (FOEI et al.), proposing that the title of the output be modified to reflect the need for conditions and areas for discharge of liquid effluents from EGCSs to be considered, proposed and designated; and proposing also the inclusion, as a minimum, of distance from nearest land, polar regions, and areas of cultural and ecological sensitivity and significance, in the scope of work;
- .6 PPR 7/12/5 (Secretariat), providing an update on the GESAMP Task Team on Exhaust Gas Cleaning Systems, including the background to its establishment, the terms of reference approved by GESAMP at its forty-sixth annual session, and the dates when the members of the Task Team met and finalized their report;
- .7 PPR 7/12/6 (CLIA), providing preliminary comments on the update in document PPR 7/12/5 and the report of the GESAMP Task Team on Exhaust Gas Cleaning Systems (PPR 7/INF.23), including the view that the GESAMP Task Team placed undue emphasis on the results and findings contained in document PPR 6/INF.20 (Germany) while giving little to no consideration to the report by CE Delft titled *The Impact of EGCS Washwater Discharges on Port Water and Sediment* and making only cursory reference to document MEPC 74/INF.27 containing a compilation and assessment of 281 cruise ship EGCS washwater samples which were taken consistent with US EPA protocol;
- .8 PPR 7/12/7 (CLIA), providing comments on document PPR 7/12/4 and, in particular, expressing CLIA's willingness to work with the co-sponsors of document PPR 7/12/4 and PPR 7/INF.22 to make available the research and inputs referenced in document PPR 7/INF.18 and the industry's extensive experience on operating EGCSs;

- .9 PPR 7/INF.6 (China et al.), providing a detailed description of the factors that may be taken into consideration when assessing the impact of washwater discharge from EGCSs operating in ports and coastal areas, as proposed in document PPR 7/12/1;
- .10 PPR 7/INF.9 (China), providing information on a methodology for assessing the pollution impact of EGCS discharge water by combining the distribution and migration relationship of washwater components, the level of washwater discharge, the establishment of a washwater discharge inventory, the simulation of the diffusion of washwater pollutants, and the evaluation of the damage impact of specific waters to form a risk assessment process for pollution hazards posed by the discharge of EGCS liquid effluents;
- .11 PPR 7/INF.18 (CLIA and INTERFERRY), containing an overview of a CE Delft study on EGCS washwater impacts to port waters and sediment through the use of MAMPEC computer modelling, which provided an evaluation of potential accumulation levels of washwater components in the waters and sediment of modelled port types;
- .12 PPR 7/INF.22 (FOEI et al.), providing a report by the International Council on Clean Transportation (ICCT) titled *A whale of a problem? Heavy fuel oil, exhaust gas cleaning systems, and British Columbia's resident killer whales*, as well as a summary of the findings; and
- .13 PPR 7/INF.23 (Secretariat), providing the report of the GESAMP Task Team on Exhaust Gas Cleaning Systems.

12.4 The Sub-Committee also had for its consideration the following documents forwarded by MEPC 74 and PPR 6:

- .1 MEPC 74/14/1 (Austria et al.), proposing a new output on "Evaluation and harmonization of rules and guidance on the discharge of liquid effluents from EGCS into waters, including conditions and areas", with a view to addressing concerns over the potential negative impact on the marine environment caused by discharge of EGCS effluents and the unilateral local measures to control the discharge;
- .2 MEPC 74/14/7 (CLIA), commenting on document MEPC 74/14/1, inter alia, with regard to the incomplete and unreleased status of the study on effluent discharges of EGCS (PPR 6/INF.20), which was referenced in document MEPC 74/14/1;
- .3 MEPC 74/14/8 (CESA), commenting on document MEPC 74/14/1, inter alia, suggesting a framework for an independent study that would gather further information on the environmental impact of EGCS discharges in advance of any decision to take further regulatory measures, and proposing changes to the title of the proposed new output;
- .4 MEPC 74/14/9 (China), proposing elements and a four-step approach to be considered when assessing the environmental impacts of discharge water from EGCS that consisted of calculation of pollutants, monitoring and study of model water areas, laboratory simulation, and assessment of effects on the marine environment and ecosystem;

-
- .5 MEPC 74/INF.10 (Panama), summarizing the key findings of a literature review on environmental impacts of EGCS that was commissioned by Panama and undertaken by a team from the Massachusetts Institute of Technology, United States; and concluding that further scientific investigations were needed for two areas (i.e. impact of EGCS effluent discharge on marine life and biogeochemical processes, and whether ships equipped with EGCS were truly equivalent to ships using low sulphur fuel regarding air emissions);
 - .6 MEPC 74/INF.24 (Japan), presenting a report on the environmental impact assessment of discharge water from EGCS, which was used for making the policy decision of the Government of Japan; and concluding that risks of discharge water from EGCS to the marine environment and marine aquatic organism were in an acceptable range or negligible from both short- and long-term perspectives;
 - .7 MEPC 74/INF.27 (CLIA), highlighting the study of 281 EGCS washwater samples, which were collected from cruise ships and analysed against 54 parameters, including polycyclic aromatic hydrocarbons (PAH) and heavy metals;
 - .8 PPR 6/INF.20 (Germany), providing information on a German project on discharge water from EGCS during which a sampling campaign was carried out on several ships using EGCS in open and closed loop operation; and
 - .9 MEPC 73/INF.5 (CESA), providing the results of a sampling campaign of washwater from EGCS on a series of ships and the subsequent analysis.

12.5 In the ensuing discussion, all delegations who spoke expressed their appreciation to the submitters of documents under this agenda item, presenting analyses and results from research projects, as well as proposals on how best to progress the work.

12.6 The Sub-Committee thanked the GESAMP EGCS Task Team for assessing the available information relating to the environmental effects of EGCS discharge water and preparing a comprehensive report, including valuable recommendations. In this context, the Sub-Committee noted, in particular, the following two recommendations:

- .1 the need for the establishment of a database, covering physico-chemical, ecotoxicological and toxicological data related to contaminants in EGCS discharge water; and
- .2 the need for a proper risk assessment of contaminants in EGCS discharge water, especially in the area of the determination of the PEC (Predicted Environmental Concentration) and the PNEC (Predicted No-Effect Concentration) and the respective DMEL (Derived Minimal Effect Level) or DNEL (Derived No Effect Level), in view of the existence of several data gaps.

12.7 With regard to the refinement of the title and scope of the output, a number of delegations expressed their support for the proposal contained in document PPR 7/12/4 while a number of other delegations supported the proposal contained in document PPR 7/12/3. In this context, the Sub-Committee noted, inter alia, the following views expressed:

- .1 there was a need to develop a framework setting out common criteria for carrying out a risk assessment of the possible impacts of the EGCS discharge water to enhance harmonization when considering restrictions in certain areas;
- .2 the scope of work should not be limited to local waters, but the risk assessment may focus on "sensitive waters", such as ports, estuary areas and busy traffic lanes;
- .3 the factors outlined in document PPR 7/INF.6 provided a good basis for a full risk assessment of EGCS discharge water, including elements contributing to possible harmonization of future risk control options;
- .4 the scope of work should address the delivery of EGCS discharge water or solid residues to port reception facilities; and
- .5 the review of the *2015 Guidelines for Exhaust Gas Cleaning Systems* should be removed from the scope of work under this output as the revision was being conducted under another separate output.

12.8 In the course of discussion, a number of delegations expressed their concerns over the proliferation of local or regional measures that restrict the use of EGCS without sufficient scientific justification and suggested that a database of such restrictions be established so that ships can use it to ensure that they always remain in compliance. Some other delegations stressed the potential combined effects and accumulation of pollutants in the EGCS discharge water, sediments and wildlife, in light of the increased number of installations of EGCS to comply with the 0.50% m/m global sulphur limit. Several delegations were of the view that due consideration had not been given by the GESAMP EGCS Task Team to the CE Delft study (PPR 7/INF.18) which utilized the recommended MAMPEC model, with emissions factors based upon a data set of over 200 washwater samples and evaluating many scenarios, including the regulatory standard OECD Port.

12.9 Following extensive discussion, the Sub-Committee agreed to refer all documents listed in paragraphs 12.3 and 12.4 to the Working Group on Prevention of Air Pollution from Ships, for further detailed consideration. With regard to the refining of the title of the scope of the output, the Sub-Committee agreed that at this stage focus should be placed on the environmental impact on "sensitive areas", such as ports, estuary areas and busy shipping lanes, but not exclusively. The Sub-Committee also agreed that options for possible future regulatory measures should not be excluded at this stage while such options should be based on scientific knowledge and risk assessment.

Instructions to the Working Group on Prevention of Air Pollution from Ships

12.10 Subsequently, the Sub-Committee instructed the Working Group on Prevention of Air Pollution from Ships, established under agenda item 9 (see paragraph 9.5), taking into consideration the comments and decisions made in plenary, to finalize the title and scope of work of the output proposed in document MEPC 74/14/1, taking into account comments and decisions made in plenary and documents PPR 7/12, PPR 7/12/1, PPR 7/12/2, PPR 7/12/3 and Corr.1, PPR 7/12/4, PPR 7/12/5, PPR 7/12/6, PPR 7/12/7, MEPC 74/14/7, MEPC 74/14/8, MEPC 74/14/9, PPR 7/INF.9, PPR 7/INF.18, PPR 7/INF.22, PPR 7/INF.23, MEPC 74/INF.10, MEPC 74/INF.24, MEPC 74/INF.27, PPR 6/INF.20 and MEPC 73/INF.5.

Report of the Working Group on Prevention of Air Pollution from Ships

12.11 Having considered the relevant parts of the report of the Working Group on Prevention of Air Pollution from Ships (PPR 7/WP.5, paragraphs 43 to 53 and annex 4), the Sub-Committee took action as described in paragraphs 12.12 and 12.13.

12.12 The Sub-Committee agreed to recommend to the Committee that the title of output 1.23, originally proposed in document MEPC 74/14/1 (Austria et al.) as "Evaluation and harmonization of rules and guidance on the discharge of liquid effluents from EGCS into waters, including conditions and areas", be revised to "Evaluation and harmonization of rules and guidance on the discharge of discharge water from EGCS into the aquatic environment, including conditions and areas". The Sub-Committee also agreed to the draft scope of work of the output, as set out in annex 11, with a view to approval by MEPC 75.

12.13 Subject to the Committee agreeing to the proposed revision of the title and the draft scope of work for output 1.23, the Sub-Committee also agreed to recommend to the Committee that it:

- .1 request the Secretariat to explore the possibility of involving GESAMP in the development of different parts of the agreed scope for scientific advice, as appropriate; and
- .2 invite interested Member Governments and international organizations to submit proposals and comments to PPR 8 in accordance with the scope of work for output 1.23.

13 DEVELOPMENT OF AMENDMENTS TO MARPOL ANNEX VI AND THE NO_x TECHNICAL CODE ON THE USE OF MULTIPLE ENGINE OPERATIONAL PROFILES FOR A MARINE DIESEL ENGINE

13.1 The Sub-Committee recalled that, following discussion, MEPC 73 had agreed to the inclusion of a new output on "Development of amendments to MARPOL Annex VI and the NO_x Technical Code on the use of multiple engine operational profiles for a marine diesel engine" in the post-biennial agenda of the Committee, assigning the PPR Sub-Committee as an associated organ, with two sessions needed to complete the work.

13.2 The Sub-Committee also recalled that MEPC 73 had agreed to the following scope of work for the output:

"Taking into account the concept of Not to Exceed (NTE) Zones, as described in documents MEPC 73/11/1 and MEPC 73/INF.15, clarify whether multiple engine operational profiles are allowed, and if so, what regulatory controls should be applied, noting these may also need to include amendments to MARPOL Annex VI and the NO_x Technical Code 2008; and if not allowed, then what amendments would be necessary to MARPOL Annex VI and the NO_x Technical Code 2008 to explicitly prohibit multiple engine operational profiles."

13.3 In this connection, the Sub-Committee had for its consideration the following documents:

- .1 PPR 7/13 (United States), providing draft amendments to MARPOL Annex VI and the NO_x Technical Code 2008 to specify when the use of multiple operational profiles is allowed (i.e. instances where an engine is certified to multiple emission Tiers and where the engine can operate on dual-fuels), and recommending the introduction of Not to Exceed (NTE) Zones to certify the ship for its intended operating profile;

- .2 PPR 7/13/1 (EUROMOT), providing comments on documents MEPC 73/11/1 and MEPC 73/INF.15 and input to the discussion on multiple operational profiles, including the view that the current definitions and relevant regulations of MARPOL Annex VI (regulations 2.6, 2.13 and 13.8) should represent the legal ground for compliant use of Engine Operational Profiles (EOPs); proposing that consideration be given to the development of explanatory guidelines for the use of multiple EOPs, including guidance on how Administrations may assess auxiliary control devices and their documentation; and supporting the consideration of NTE Zones;
- .3 PPR 7/13/2 (Finland) proposing to clarify the use of certification test cycles given in the NO_x Technical Code 2008 by adding three new definitions to chapter 1 of the NO_x Technical Code 2008 for main propulsion, diesel electric drive and auxiliary engine; and
- .4 PPR 7/13/3 (Japan), proposing that multiple engine profiles should be allowed subject to a robust verification mechanism being in place; a "worst case" verification method to ensure compliance with regulation 13 of MARPOL Annex VI in the case of multiple EOPs being used; and a draft unified interpretation of the NO_x Technical Code 2008 to clarify how the "worst-case" method could be conducted.

13.4 Owing to time constraints, the Sub-Committee referred all of the above-mentioned documents directly to the Working Group on Prevention of Air Pollution from Ships for detailed consideration, having noted that all proposals were highly technical.

Instructions to the Working Group on Prevention of Air Pollution from Ships

13.5 The Sub-Committee instructed the Working Group on Prevention of Air Pollution from Ships, established under agenda item 9 (see paragraph 9.5), taking into consideration the comments and decisions made in plenary, to:

- .1 further consider documents PPR 7/13, PPR 7/13/1, PPR 7/13/2 and PPR 7/13/3, and taking into account the concept of Not to Exceed (NTE) Zones, as described in documents MEPC 73/11/1 and MEPC 73/INF.15, clarify whether multiple engine operational profiles are allowed, and if so, what regulatory controls should be applied, noting these may also need to include amendments to MARPOL Annex VI and the NO_x Technical Code 2008; and
- .2 if not allowed, then what amendments would be necessary to MARPOL Annex VI and the NO_x Technical Code 2008 to explicitly prohibit multiple engine operational profiles.

Report of the Working Group on Prevention of Air Pollution from Ships

13.6 Having noted that, owing to time constraints, the Working Group had not been able to consider the documents on multiple engine operational profiles that had been referred to it (PPR 7/WP.5, paragraph 54), the Sub-Committee agreed to defer all relevant documents under this agenda item (MEPC 73/11/1, MEPC 73/INF.15, PPR 7/13, PPR 7/13/1, PPR 7/13/2, and PPR 7/13/3) to PPR 8 for detailed consideration.

14 DEVELOPMENT OF MEASURES TO REDUCE RISKS OF USE AND CARRIAGE OF HEAVY FUEL OIL AS FUEL BY SHIPS IN ARCTIC WATERS

General

14.1 The Sub-Committee recalled that MEPC 71 had agreed to include a new output on "Development of measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters" in the 2018-2019 biennial agenda of the Committee, assigning the PPR Sub-Committee as the associated organ, with two sessions needed to complete the work.

14.2 The Sub-Committee also recalled that MEPC 72 had approved the following scope of work for the PPR Sub-Committee:

- .1 develop a definition of heavy fuel oil (HFO) taking into account regulation 43 of MARPOL Annex I;
- .2 prepare a set of Guidelines on mitigation measures to reduce risks of use and carriage of HFO as fuel by ships in Arctic waters, taking into account document MEPC 72/11 (Russian Federation); and
- .3 on the basis of an assessment of the impacts, develop a ban on HFO for use and carriage as fuel by ships in Arctic waters, on an appropriate timescale.

Report of the Correspondence Group and related documents

14.3 The Sub-Committee recalled that PPR 6 had established the Correspondence Group on Development of Guidelines on Measures to Reduce Risks of Use and Carriage of Heavy Fuel Oil as Fuel by Ships in Arctic Waters, with terms of reference as set out in paragraph 12.31 of document PPR 6/20, and instructed it to develop draft guidelines accordingly.

14.4 The Sub-Committee had for its consideration document PPR 7/14 (Russian Federation), providing the report of the Correspondence Group, and document PPR 7/14/5 (ICS et al.) providing comments on the report of the Correspondence Group (PPR 7/14) and in particular, highlighting the concerns of the co-sponsors with respect to specific recommendations in the draft Guidelines aimed at the ship operator.

14.5 In the ensuing discussion, all delegations that spoke supported further development of the draft Guidelines as set out in the annex of the report of the Correspondence Group (PPR 7/14), and the concerns raised in document PPR 7/14/5 also received wide support. Several delegations expressed the view that further work on the Guidelines should focus on HFO spill reduction measures, and some delegations supported limiting duplication between the draft Guidelines and existing IMO instruments. One delegation expressed the view that specific recommendatory provisions on ship construction should not deviate from mandatory instruments, and that the scope of the Guidelines would need to be clarified should these provisions be retained. Another delegation expressed the view that once the draft Guidelines were finalized, the NCSR Sub-Committee should be invited to review those provisions concerning navigational measures.

14.6 Following discussion, the Sub-Committee agreed that the draft Guidelines should be further developed in order to reduce duplication with existing IMO instruments and to better delineate areas of responsibility between ship operators and maritime Administrations. The Sub-Committee noted during consideration that there was no clear instruction with regard to whether the annex to the draft Guidelines containing national legislation of Arctic States should be retained, and that there is a need to consider whether any section of the draft Guidelines should be referred to other Sub-Committees as appropriate, such as NCSR.

14.7 Subsequently, the Sub-Committee agreed to instruct the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines to finalize the draft Guidelines on mitigation measures to reduce risks of use and carriage of HFO as fuel by ships in Arctic waters, using the annex to document PPR 7/14 as a basis, taking into account document PPR 7/14/5.

Impact assessments and proposals on development of a ban on HFO for use and carriage as fuel by ships in Arctic waters

14.8 The Sub-Committee recalled that PPR 6 had:

- .1 agreed to a working definition of HFO;
- .2 agreed to the draft Methodology to analyse impacts of a ban on the use and carriage of HFO as fuel by ships in Arctic waters, which was subsequently approved at MEPC 74;
- .3 invited submissions to PPR 7, especially by Arctic States, containing impact assessments guided by, but not limited to, the agreed methodology; and
- .4 forwarded to PPR 7 documents PPR 6/12 (FOEI et al.), PPR 6/12/4 (Canada), PPR 6/INF.8 (WWF), PPR 6/INF.19 (CSC), PPR 6/INF.21 (Denmark), PPR 6/INF.24 (Canada) and PPR 6/INF.25 (FOEI et al.) containing impact assessments.

14.9 With regard to impact assessments and proposals on development of a ban on the use and carriage of HFO as fuel by ships in Arctic waters, the Sub-Committee had for its consideration the following documents, which had been submitted to this session or forwarded by PPR 6:

- .1 PPR 7/14/1 (FOEI et al.), describing Arctic Indigenous support for the ban on the use and carriage of HFO as fuel by ships operating in Arctic waters, consisting of a compilation of interventions delivered by Indigenous leaders at IMO and resolutions passed by Arctic Indigenous communities and organizations;
- .2 PPR 7/14/2 (Russian Federation), containing the summary of results of the impact assessment carried out by the Russian Federation (report provided in document PPR 7/INF.13), concluding that a ban would negatively impact the local communities and industries of the region, while the potential benefits of a ban remain unclear on account of national measures to reduce the risk of HFO spills, and also outlining the factors to be taken on board as part of further work on the development of a potential ban to use and carry HFO for use as fuel in Arctic waters;
- .3 PPR 7/14/3 (United States), summarizing the findings of an analysis of impacts of a proposed HFO ban on communities and industries in the Arctic and near-Arctic regions of Alaska, contained in document PPR 7/INF.19, including costs to local communities if tanker vessel owners switch to marine gas oil, operating costs to bulk carriers from the port of Red Dog, and benefits of avoided spill costs and damages as well as the prevention of a loss of marine and natural resources important to the food security and subsistence culture of approximately 54,040 Alaskans;

-
- .4 PPR 7/14/4 (Denmark et al.), providing draft amendments to MARPOL Annex I and the Polar Code to incorporate a ban on the use and carriage for use as fuel of HFO by ships in Arctic waters;
 - .5 PPR 7/14/6 (FOEI et al.), commenting on document PPR 7/14/4 and supporting the process outlined in document PPR 7/14/4 but not agreeing that delays or exemptions to a ban are necessary;
 - .6 PPR 7/INF.11 (Denmark), containing an updated impact assessment on establishing a ban on use the HFO for marine propulsion in Arctic waters for Greenland, as well as the full report;
 - .7 PPR 7/INF.13 (Russian Federation), containing the report on the impact assessment carried out by the Russian Federation with regard to the development of a ban to use and carry HFO for use as fuel in Arctic waters;
 - .8 PPR 7/INF.14 (Norway), providing the main conclusions from the report by DNV GL on an impact assessment of a ban on HFO in Norwegian Arctic waters and highlighting the conclusion that a ban on HFO in the Norwegian Arctic waters will not necessarily result in a reduction of environmental risk due to the properties of new hybrid residual fuels introduced following the global 0.50% m/m sulphur limit in 2020, unless the ban included all residual fuel blends, and providing estimated added costs to Norwegian Arctic communities while noting almost all ships serving the communities are using distillates, as well as the full report;
 - .9 PPR 7/INF.16 (Canada), containing an assessment of the expected benefits and impacts of a ban on HFO on Canadian northern, Indigenous, and Inuit communities and economies, and putting forward the view that, when weighing action to reduce the environmental risks associated with the use and carriage for use as fuel of HFO in the Arctic, social, economic and other impacts on vulnerable Arctic communities must also be taken into account;
 - .10 PPR 7/INF.19 (United States), providing the full text of the "Impact Assessment for a Ban on Heavy Fuel Oil Use and Carriage as Fuel by Ships in the United States Arctic Waters", which includes costs to local communities if tanker vessel owners switch to marine gas oil, operating costs to bulk carriers from the port of Red Dog, and benefits of avoided spill costs and damages as well as the prevention of a loss of marine and natural resources important to the food security and subsistence culture of approximately 54,040 Alaskans;
 - .11 PPR 7/INF.24 (FOEI et al.), summarizing the findings of an analysis by the International Council on Clean Transportation (ICCT) on fuel and voyage costs effects on bulk carriers used in Canadian Arctic mining operations under an Arctic HFO ban, as well as a presentation containing more details;
 - .12 PPR 6/12 (FOEI et al.), providing information on the existing body of research regarding environmental, economic, and social impacts resulting from a ban on the use and carriage of HFO as fuel by ships operating in Arctic waters, and suggesting that most of the impact assessment methodology steps provided for under document MEPC 73/9/2 have been completed;

- .13 PPR 6/12/4 (Canada), outlining considerations related to the impacts of a ban on HFO and related mitigation on Arctic communities in Canada, and putting forward the view that, when weighing action to reduce the environmental risks associated with the use and carriage for use as fuel of HFO in the Arctic, possible social, economic and other impacts on vulnerable Arctic communities must also be taken into account;
- .14 PPR 6/INF.8 (WWF), providing a summary of the findings of a report commissioned by WWF and undertaken by Nuka Research and Planning Group and Northern Economics entitled *Phasing Out the Use and Carriage for Use of Heavy Fuel Oil in the Canadian Arctic: Impacts to Northern Communities*, as well as the full report;
- .15 PPR 6/INF.19 (CSC), providing the findings of a study on the likely impact of an Arctic HFO ban on cruise industry costs and passenger ticket prices, based on an analysis of three summer voyages in 2018 to the Arctic by the **MS Rotterdam**, as well as the full report;
- .16 PPR 6/INF.21 (Denmark), containing an assessment of the socioeconomic, environmental and climate impacts for Greenland that would result from a ban on HFO in Arctic waters;
- .17 PPR 6/INF.24 (Canada), providing a summary of the findings of a report undertaken by Canada entitled *An Overview of Canada's Arctic and the Role of Maritime Shipping in Arctic Communities*, as well as the full report; and
- .18 PPR 6/INF.25 (FOEI et al.), providing a summary of the key findings of a report by CE Delft on *Residual bunker fuel ban in the IMO Arctic waters – an assessment of costs and benefits*, as well as the full report.

14.10 In the ensuing discussion, the delegation of the Russian Federation expressed the view that a ban on HFO use as fuel in the Arctic, though introduced by a global mandatory instrument, would have impacts borne primarily by the Arctic States. Subsequently, this delegation proposed that the introduction of such a ban must take into account the specific factors and individual characteristics of each Arctic State, as identified in the impact assessments submitted to this session. Furthermore, as most people in the Russian Arctic are engaged in ordinary economic activities and are highly dependent on goods being delivered by sea, a ban on HFO in the Arctic would negatively affect the social and economic situations of the population of the Russian Arctic, including Indigenous communities, as well as the local economy dependent on shipping.

14.11 The delegation of Canada, while expressing its support for the draft amendments in document PPR 7/14/4, suggested an entry-into-force date of 1 July 2024 to provide for a transition period to better understand and mitigate any negative impacts of an HFO ban on Arctic communities and economies. The delegation of Canada further expressed the view that due to the 2020 Global Sulphur Limit, fuel markets are currently undergoing many changes in both fuel prices and fuel properties; therefore, a sensible implementation timeline for the potential ban would be beneficial in order to allow fuel markets and the shipping industry time to adjust to the 2020 Global Sulphur Limit, thus allowing any negative financial impacts of an Arctic HFO ban to be assessed and mitigated, as well as to allow work on adequate spill preparation efforts for the new fuels, with a view to ensuring that Arctic countries are properly prepared for implementation.

14.12 Many delegations supported the draft amendments proposed in document PPR 7/14/4, and in particular, the amendment to MARPOL Annex I with the entry-into-force date of 1 July 2024 proposed by the delegation of Canada.

14.13 Some delegations expressed their support in general for the proposed amendments in document PPR 7/14/4, but not for the proposed provision granting a 5-year delay to ships constructed in compliance with regulation 12A of MARPOL Annex I or part II-A, chapter 1, regulation 1.2.1 of the Polar Code. These delegations urged the Sub-Committee to consider the views of indigenous communities in support of a ban on HFO in Arctic waters.

14.14 Many delegations expressed the view that while measures to reduce the risks of an HFO fuel spill in Arctic waters should be developed, the impact assessments conducted by Arctic States and submitted to PPR 7 must be taken into account, and any such measures should not have significant detrimental economic impacts on affected States and communities.

14.15 The delegation of the Bolivarian Republic of Venezuela made a statement regarding the need to take into account the socio-economic needs of affected States when considering the development of restrictive measures, and expressing the view flexible, rather than rigid, measures should be developed to take into account the diverse circumstances of Arctic populations. As requested, the full text of the statement is set out in annex 22.

14.16 Following consideration, the Sub-Committee agreed that a prohibition on the use and carriage of HFO as fuel by ships in Arctic waters should include a delayed phase-in period, and that consideration should also be given to all of the impact assessments to address the factors identified by the assessments as far as possible. The Sub-Committee noted that an amendment to either MARPOL or the Polar Code would be sufficient and recalled that PPR 6 had agreed that an amendment to MARPOL would be preferable.

14.17 Subsequently, the Sub-Committee instructed the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines to review the impact assessments submitted to PPR 6 and PPR 7, and on the basis of those assessments develop, with a view to finalization, draft amendments to MARPOL Annex I and/or the Polar Code to incorporate a ban on the use and carriage of HFO as fuel by ships in Arctic waters, using document PPR 7/14/4 as a basis, taking into account the factors listed in paragraphs 17 to 19 of document PPR 7/14/2, as well as document PPR 7/14/6.

Establishment of the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines

14.18 The Sub-Committee established the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines and instructed it, taking into consideration the comments and decisions made in plenary, to:

- .1 finalize the Guidelines on measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters using the annex to document PPR 7/14 as a basis, taking into account document PPR 7/14/5; and
- .2 review the impact assessments in documents PPR 7/14/2, PPR 7/14/3, PPR 7/INF.11, PPR 7/INF.13, PPR 7/INF.14, PPR 7/INF.16, PPR 7/INF.19, PPR 7/INF.24, PPR 6/12, PPR 6/12/4, PPR 6/INF.8, PPR 6/INF.19, PPR 6/INF.21, PPR 6/INF.24 and PPR 6/INF.25, and on the basis of those assessments develop, with a view to finalization, draft amendments to MARPOL Annex I and/or the Polar Code to incorporate a ban on the use and carriage for use as fuel of HFO by ships in Arctic waters, using document PPR 7/14/4 as a basis, taking into account the factors listed in paragraphs 17 to 19 of document PPR 7/14/2, as well as document PPR 7/14/6.

Report of the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines

14.19 Having considered part I of the report of the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines (PPR 7/WP.6), the Sub-Committee approved the report in general and took action as described in paragraphs 14.20 to 14.25.

Draft Guidelines on measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters

14.20 Having noted that owing to time constraints, the Working Group was not able to finalize the draft Guidelines on measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters, the Sub-Committee re-established the Correspondence Group on Development of Guidelines on Measures to Reduce Risks of Use and Carriage of Heavy fuel Oil as Fuel by Ships in Arctic Waters, under the coordination of the Russian Federation,³ and instructed it to:

- .1 further develop the draft Guidelines on measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters on the basis of document PPR 7/14, as amended by PPR 7 and set out in annex 1 of PPR 7/WP.6, taking into account documents PPR 7/14/5, PPR 7/WP.6 and PPR 7/22; and
- .2 submit a written report to PPR 8.

Impact assessments and proposals on development of a ban on HFO for use and carriage as fuel by ships in Arctic waters

14.21 The delegation of the Russian Federation made a statement, supported by the delegations of China and Saudi Arabia, noting the willingness of the Working Group to seek compromise with regard to considering the results of the consequences of a prohibition on HFO in the Arctic and the specific socio-economic situations of the various Arctic States while also expressing concern with the lack of a provision for reviewing the waiver deadline of 1 July 2029. This delegation also expressed the view that actions involving mandatory decisions must be developed only after sufficient scientific and technical development. The full text of the statement is set out in annex 22.

14.22 Several delegations, including Canada, Denmark, Finland, Germany, Iceland, Spain and Sweden, expressed support for the draft amendments to MARPOL Annex I developed by the Working Group and their submission to MEPC 76 for approval, and also noting that all Parties had made difficult compromises in order to reach agreement.

14.23 The observer from Pacific Environment, on behalf of the delegations of FOEI, WWF, CSC and Pacific Environment, expressed support for the prohibition and meaningful protections for the Arctic environment and its local and Indigenous communities, while also expressing concern for its delayed implementation and the resultant potential for HFO pollution.

³

Coordinator:

Dr. N. Kutaeva
Marine Rescue Service of Rosmorrechflot
Ministry of Transport of the Russian Federation
Tel.: +7 495 626 18 06
Email: kutaevang@morspas.com

14.24 Subsequently, the Sub-Committee agreed to the draft amendments to MARPOL Annex I to incorporate a prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters, set out in annex 12, for submission to MEPC 76 with a view to approval and subsequent circulation for adoption.

Extension of the target completion year

14.25 In view of the above, the Sub-Committee invited MEPC 75 to extend the target completion year for the output to 2021, in order for the Sub-Committee to complete the work on the development of draft guidelines on measures to reduce risks of use and carriage of heavy fuel oil as fuel by ships in Arctic waters.

15 REVIEW OF THE IBTS GUIDELINES AND AMENDMENTS TO THE IOPP CERTIFICATE AND OIL RECORD BOOK

15.1 The Sub-Committee recalled that PPR 6 had established the Correspondence Group on Review of the IBTS Guidelines and Amendments to the IOPP Certificate and Oil Record Book and had instructed it to prepare draft consolidated IBTS Guidelines and draft amendments to the IOPP Certificate and Oil Record Book.

15.2 The Sub-Committee had for its consideration the following documents:

- .1 PPR 7/15 (Chair of the Working Group), providing part 2 of the report of the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines established at PPR 6, in relation to the review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book; and
- .2 PPR 7/15/1 (INTERTANKO), providing the report of the Correspondence Group on Review of the IBTS Guidelines and Amendments to the IOPP Certificate and Oil Record Book, which included the draft consolidated IBTS Guidelines; proposed amendments to appendix II (Form of IOPP Certificate and Supplements) and appendix III (Form of Oil Record Book) of MARPOL Annex I; proposed amendments to the *Guidance for the recording of operations in the Oil Record Book Part I – machinery space operations (all ships)* (MEPC.1/Circ.736/Rev.2) (ORB Guidance); and additional items for consideration.

15.3 The Sub-Committee approved, in general, part 2 of the report of the Working Group established by PPR 6. In noting support for documents PPR 7/15 and PPR 7/15/1 to be referred to the Working Group for further detailed technical consideration, with a view to finalizing the work under this output, the Sub-Committee also noted comments on the need for any amendments to the Form of IOPP Certificate and Supplements, the Form of Oil Record Book and the ORB Guidance, to be fully consistent with the requirements in MARPOL Annex I. In this regard, amendments relating to recording of the transfer from bilge wells to the bilge holding tank when passing through the bilge separation unit or amendments regarding listing alternative means of disposal oily bilge water, such as evaporation, were highlighted as requiring additional discussion.

Instructions to the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines

15.4 Subsequently, the Sub-Committee instructed the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines established under agenda item 14 (see paragraph 14.18), taking into account documents PPR 7/15 and PPR 7/15/1, as well as the comments and decisions made in plenary, to:

- .1 finalize the draft revised IBTS Guidelines and the accompanying draft MEPC circular;
- .2 prepare draft amendments to the IOPP Certificate and Oil Record Book; and
- .3 prepare draft amendments to the *Guidance for the recording of operations in the Oil Record Book Part I – machinery space operations (all ships)* (MEPC.1/Circ.736/Rev.2).

Report of the Working Group on HFO in Arctic Waters and on Review of the IBTS Guidelines

15.5 Having considered the relevant parts of the report of the Working Group dealing with this agenda item (PPR 7/WP.6/Add.1), the Sub-Committee approved it in general and took action as described in paragraphs 15.6 to 15.11.

15.6 The Sub-Committee noted that the Working Group had prepared the draft 2020 Guidelines for systems for handling oily wastes in machinery spaces of ships incorporating guidance notes for an integrated bilge water treatment system (IBTS) (2020 IBTS Guidelines) (PPR 7/WP.6/Add.1, annex 1) and the draft revised Guidance for the recording of operations in the Oil Record Book Part I – machinery space operations (all ships) (ORB Guidance) (PPR 7/WP.6/Add.1, annex 3), together with the accompanying draft MEPC circulars.

15.7 The Sub-Committee also noted that the Working Group, in preparing the draft amendments to appendix II (Form of the IOPP certificate and Supplements) and appendix III (Form of Oil Record Book) to MARPOL Annex I, had been unable to reach consensus on whether the addition of a new section to list other means of disposal of oily bilge water (i.e. evaporation or incineration) were consistent with the requirements of MARPOL Annex I, and therefore had placed the draft amendments within square brackets.

15.8 In this context, the delegation of Denmark, supported by others, expressed the view that evaporation of oily bilge water and thereby disposal without any control of the oil content went against MARPOL requirements. The delegation of Denmark also expressed the view that evaporation of oily bilge water could not be considered an equivalent under regulation 5 of MARPOL Annex I, as in the absence of any control of the remaining oil content, evaporation could not be considered as being at least as effective as the requirements in MARPOL Annex I. Conversely, the observer from INTERTANKO contended that evaporation of oily bilge water had been agreed at PPR 5 and PPR 6 and expressed the view that further clarity could be provided if interested Member Governments and international organizations submitted relevant documents to MEPC 76.

15.9 At its request, the Sub-Committee was provided with preliminary legal advice by the Legal Affairs Office of the Organization. The Sub-Committee was advised that from a legal perspective the matter was broader and related to appropriate treaty practice and process with respect to developing regulations and enacting them in MARPOL. By amending the IOPP Certificate there was an attempt to authorize different methods of disposal of oily bilge water when there was no corresponding reference to the operational requirements within MARPOL Annex I. This could raise issues in respect of appropriate regulatory practice, since normally a certificate did not contain the regulations itself but was merely a reflection of whether the ship was in compliance with the regulations. Likewise, regulation 17.2.4 of MARPOL Annex I, which had been referenced in the draft amendments to the IOPP Certificate, sets out reporting requirements rather than operational requirements. Therefore, in the view of the Legal Affairs Office of the Organization it was preliminarily apparent that the solution would be to create regulations that address appropriate means of the disposal of oily bilge water within MARPOL

Annex I as opposed to placing such requirements in the IOPP Certificate. This would be consistent with the practice followed in regulation 12 of MARPOL Annex I, where means of disposal of oil residues and sludge are listed. Additional analysis on this matter could be prepared by the Secretariat and submitted to MEPC 76, if necessary.

15.10 Following discussion, the Sub-Committee requested MEPC 76 to consider the draft MEPC circular on the 2020 Guidelines for systems for handling oily wastes in machinery spaces of ships incorporating guidance notes for an integrated bilge water treatment system (IBTS), as set out in annex 13, the draft amendments to appendix II (Form of the IOPP certificate and Supplements) and appendix III (Form of Oil Record Book) of MARPOL Annex I, as set out in annex 14, and the draft revised MEPC circular on Guidance for the recording of operations in the Oil Record Book Part I – machinery space operations (all ships), as set out in annex 15, as a package, in conjunction with any additional submissions by interested Member Governments and international organizations as well as the legal advice provided by the Secretariat, and decide on whether they can be approved.

Completion of the work on the output

15.11 In view of the above, the Sub-Committee invited MEPC 75 to note that the work on output 2.13 (Review of the IBTS Guidelines and amendments to the IOPP Certificate and Oil Record Book) had been completed subject to the final decision by MEPC 76.

16 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

16.1 The Sub-Committee recalled that MEPC 74 had considered document MEPC 74/14 (Norway), proposing to expand the scope of output 1.26 to include a revision of MARPOL Annex IV and associated guidelines, and agreed to amend the title of the output to "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".

16.2 With regard to the renamed output, the Sub-Committee also recalled that MEPC 74 had instructed it to:

- .1 seek the input of the III and HTW Sub-Committees in relation to issues of port State control and human element, as appropriate;
- .2 give due consideration to the application of draft amendments to MARPOL Annex IV, taking into account the general principle that ships should not be unduly penalized; and
- .3 further consider the comment by the observer from IACS, as noted by MEPC 74, seeking clarification on whether the scope of the work (MEPC 74/14, paragraph 16) should include not only amendments to regulations of MARPOL Annex IV but also development of associated templates or guidelines in relation to sewage record-keeping and sewage management plans.

16.3 In this connection, the Sub-Committee had for its consideration the following documents:

- .1 PPR 6/14 (Norway), as deferred by PPR 6, proposing amendments to the *2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants* (resolution MEPC.227(64), as amended by resolution MEPC.284(70));

- .2 PPR 7/16 (Norway), proposing amendments to MARPOL Annex IV in order to introduce provisions for record-keeping and measures to confirm the lifetime of sewage treatment plants (STP);
- .3 PPR 7/16/1 (China), providing considerations on record-keeping and onboard tests in surveys to guarantee the lifetime performance of sewage treatment plants;
- .4 PPR 7/16/2 (CLIA), proposing STP performance testing at the time of commissioning and during renewal survey of the International Sewage Pollution Prevention Certificate (ISPPC), and suggesting guidance for record-keeping;
- .5 PPR 7/16/3 (Bahamas), proposing the use of the term "sewage sludge" as an alternative to the term "sewage residues", and providing a draft definition for consideration;
- .6 PPR 7/16/4 (FOEI et al.), providing recommendations to further enhance the proposed amendments in document PPR 7/16, including the need to address grey water treatment as part of this process;
- .7 PPR 7/16/5 (CLIA) providing comments to document PPR 7/16; and
- .8 PPR 7/INF.21 (Germany), providing information on the draft guidelines for the development of a management plan for the treatment of sewage and other washwater and a draft wastewater record book prepared by the German DIN Standards Committee Shipbuilding and Marine Technology (NSMT).

16.4 In this context, the Sub-Committee noted that document PPR 6/14/1 (CLIA), which had been deferred by PPR 6 for consideration at this session, had been superseded by the outcome of MEPC 74, specifically the instruction to the Sub-Committee to give due consideration to the application of any draft amendments to MARPOL Annex IV.

16.5 Following discussion, the Sub-Committee agreed that work on this matter could be progressed intersessionally through a correspondence group and noted, inter alia, the following views:

- .1 the proposals set out in document PPR 7/16 formed a good basis for further work and should be referred, together with the other documents that were submitted and referred to this session, to the correspondence group for further consideration;
- .2 careful consideration should be given to the application of the proposed draft amendments to MARPOL Annex IV; in this regard, the general principle of not unduly penalizing ships, as set out in article 16(6) of MARPOL, and the principle of being fair to shipowners that had taken extra steps to ensure that the discharge requirements are met, should be taken into account;
- .3 the amendments to both MARPOL Annex IV and the associated guidelines should be compatible and the terminologies used should be consistent throughout;
- .4 the requirements for commissioning testing and performance monitoring goes against the fundamental concept of type-approvals for STPs; commissioning testing should not cause undue delays to ships;

- .5 the conditions and objectives of the proposed commissioning tests should be assessed; for example, commissioning tests should be carried out with an entrance rate and a pollution load that corresponds to the normal functioning of the installation as well as the maximum rate;
- .6 the proposal to issue a short-term interim certificate raises legal questions on the compliance of ships during this interim phase;
- .7 the existing effluent limits for nitrogen removal as set out in the *2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants* (resolution MEPC.227(64)) should be maintained as it would be challenging to meet the proposed nitrogen limits set out in document PPR 7/16 if the nitrogen concentrations in wastewater are high; and
- .8 consideration should be given to actions that would be taken in case of non-compliance.

16.6 With regard to grey water treatment, the Sub-Committee agreed that addressing this was outside the scope of MARPOL Annex IV and the current output but noted that there was support for grey water to be considered at a future session. Following discussion, the Sub-Committee concluded that interested Member States and international organizations could submit proposals to MEPC to either expand the current output or introduce a new output regarding grey water treatment.

Establishment of the Drafting Group on MARPOL Annexes IV and V

16.7 In light of the above, the Sub-Committee established the Drafting Group on MARPOL Annexes IV and V and instructed it, taking into account documents PPR 6/14, PPR 7/16, PPR 7/16/1, PPR 7/16/2, PPR 7/16/3, PPR 7/16/4, PPR 7/16/5 and PPR 7/INF.21, the instructions from MEPC 74, and the comments and decisions made in plenary, to develop draft terms of reference for a correspondence group on sewage treatment plants.

Report of the Drafting Group on MARPOL Annexes IV and V

16.8 Having considered the part of the report of the Drafting Group on MARPOL Annexes IV and V dealing with this agenda item (PPR 7/WP.7, paragraph 4 to 7, annex 1), the Sub-Committee approved the report in general and took action as described in paragraph 16.9.

Establishment of a correspondence group

16.9 The Sub-Committee established the Correspondence Group on Amendments to MARPOL Annex IV and Associated Guidelines, under the coordination of Norway,⁴ and instructed it to:

- .1 consider the following and develop, as appropriate, draft amendments to MARPOL Annex IV using the annex to document PPR 7/16 as the basis:

⁴ **Coordinator:**
Ms. Andrea Skarstein
Norwegian Maritime Authority
Email: ANSK@SDIR.NO
Tel: +47 52745817

- .1 the topics identified in document PPR 7/16;
- .2 documents PPR 7/16/1, PPR 7/16/2, PPR 7/16/3, PPR 7/16/4, PPR 7/16/5 and PPR 7/INF.21, and the instructions from MEPC 74 as set out in paragraphs 14.5 to 14.7 in document MEPC 74/18; and
- .3 the decisions and comments made at PPR 7, including:
 - .1 further review of the definitions used in MARPOL Annex IV, including "sewage residue" and "sewage sludge", and determine the appropriate terms to be used;
 - .2 review of the scope of application of the draft amendments to MARPOL Annex IV to new and existing ships; and
 - .3 reviewing the need to provide adequate port reception facilities.
- .2 identify consequential guidance required when preparing the draft amendments to MARPOL Annex IV;
- .3 develop draft amendments to associated guidelines, taking into account document PPR 6/14; and
- .4 submit a written report to PPR 8.

17 FOLLOW-UP WORK EMANATING FROM THE ACTION PLAN TO ADDRESS MARINE PLASTIC LITTER FROM SHIPS

17.1 The Sub-Committee recalled that MEPC 73 had adopted the *Action Plan to address marine plastic litter from ships* (resolution MEPC.310(73)) (Action Plan).

17.2 The Sub-Committee also recalled that MEPC 74 had approved the scope of work of the PPR Sub-Committee in relation to marine plastic litter from ships (MEPC 74/18, paragraph 8.37.1; and MEPC 74/18/Add.1, annex 21, as corrected by MEPC 74/18/Add.1/Corr.1), and had agreed to add output 4.3 on "Follow-up work emanating from the Action Plan to address marine plastic litter from ships" to the provisional agenda of PPR 7, with four sessions assigned to complete the work.

Amendment of MARPOL Annex V and the associated implementation Guidelines

17.3 With regard to reporting of fishing gear that have been lost or discharged, the Sub-Committee had for its consideration document PPR 7/17 (Cook Islands et al.), proposing:

- .1 amendments to regulation 10.6 of MARPOL Annex V to delete the word "accidental" and the phrase "which poses a significant threat to the marine environment or navigation";
- .2 the inclusion of a requirement in MARPOL Annex V for Parties to notify IMO of the loss or discharge of fishing gear; and
- .3 the development of a new MEPC resolution providing clarification on the implementation of the mandatory reporting requirement of fishing gear that have been lost or discharged, based on a revised section 2.2 of the *2017 Guidelines for the implementation of MARPOL Annex V*.

17.4 The Sub-Committee agreed that the matter under consideration required further in-depth discussion in a working group. However, as an additional working group could not be established at this session, the Sub-Committee agreed, in principle, that marine plastic litter from ships would be considered by a working group at PPR 8.

17.5 In this connection the Sub-Committee noted that there was support for the establishment of a correspondence group to carry out work intersessionally on how to amend MARPOL Annex V and the *2017 Guidelines for the implementation of MARPOL Annex V* (resolution MEPC.295(71)).

17.6 Specifically, in relation to the proposals in document PPR 7/17, the Sub-Committee noted, inter alia, the following views:

- .1 it would be appropriate to amend regulation 10.6 of MARPOL Annex V as proposed in document PPR 7/17, develop a new regulation 10.7 related to the notification to IMO of the loss or discharge of fishing gear, and convert section 2.2 of the *2017 Guidelines for the implementation of MARPOL Annex V* into an MEPC resolution, on the basis that the proposals in document PPR 7/17 were generally supported;
- .2 the terminologies used in the proposed MEPC resolution should align with the *2017 Guidelines for the implementation of MARPOL Annex V*;
- .3 the content, modality and frequency of reports should be considered to avoid unnecessary administrative burden to stakeholders;
- .4 the conditions for the partial declaration for the loss of fishing gear should be specified;
- .5 the data to be collected and reported to IMO, and the purpose of this data should be clarified;
- .6 given the diversity in the types of fishing gear available globally, it would be difficult to harmonize the type of data to be reported; Member States should therefore be given the prerogative to determine the type of data that should be reported;
- .7 there was concern regarding the violation of the confidentiality afforded to fishing vessels and that further consideration on the type of data to be reported would be needed;
- .8 deletion of the word "accidental" from regulation 10.6 of MARPOL Annex V could lead to confusion as the purposeful discharge of fishing gear has long been prohibited, unless required for the safety of the crew, vessel or marine environment;
- .9 in order to effect meaningful change, reporting requirement, including clarifying language on the thresholds that require reporting of lost fishing gear, should be included in MARPOL Annex V or its associated guidelines, rather than in a resolution; and
- .10 consideration should be given to raising awareness amongst relevant stakeholders of the existing reporting requirements to flag and/or coastal States for the accidental loss or discharge of fishing gear; Member States should be encouraged to share their reporting procedures;

17.7 Subsequently, the Sub-Committee instructed the Drafting Group on MARPOL Annexes IV and V to develop draft terms of reference for a correspondence group on marine plastic litter from ships, with a view to progressing the work set out in paragraph 7 of the scope of work of the PPR Sub-Committee in relation to marine plastic litter (MEPC 74/18/Add.1, annex 21), taking into account document PPR 7/17, and the comments and decisions made in plenary.

MEPC circulars relating to marine plastic litter

17.8 The Sub-Committee considered document PPR 7/17/1 (Secretariat) proposing two draft MEPC circulars, one reminding Member States of the requirement to provide adequate facilities at ports and terminals for the reception of garbage, and another encouraging Member States and international organizations to share research results on marine litter.

17.9 Specifically, in relation to the draft circular reminding Member States of the requirement to provide adequate facilities at ports and terminals for the reception of garbage, the Sub-Committee noted that there was support to include specific reference to fishing gear in the circular to bring the attention of Member States to this major source of garbage. One delegation objected to such an inclusion, stating that any reference to fishing gear as garbage may cause confusion since fishing gear itself would not be garbage until discarded.

17.10 In addition, the Sub-Committee noted, inter alia, the following views:

- .1 a dedicated GISIS module should be established to facilitate the reporting of data on lost or discharged fishing gear to IMO;
- .2 the circulars, as drafted, did not adequately address the sustainable handling of garbage ashore; it would be important to define which types of fishing gear would be required to be reported; and
- .3 better understanding of the sources of marine plastic litter was required; surveys should be carried out to determine whether onshore municipal treatment facilities were able to treat wastewater and purify them for microplastics; studies should be carried out to understand the sources, concentration and volumes of microplastic in marine wastewater.

17.11 Subsequently, the Sub-Committee instructed the Drafting Group on MARPOL Annexes IV and V to finalize the two MEPC circulars, using annexes 2 and 3 to document PPR 7/17/1 as a basis.

Amendments to the Procedures for port State control on the use of electronic record books

17.12 Having considered the request by III 6 to further review the draft amendments to the Procedures for port State control on the use of electronic record books, as set out in annex 15 to document PPR 5/24, that had not been included in the Procedures for port State control by III 6, the Sub-Committee agreed to instruct the Drafting Group on MARPOL Annexes IV and V to review this request.

Instructions to the Drafting Group on MARPOL Annexes IV and V

17.13 The Sub-Committee instructed the Drafting Group on MARPOL Annexes IV and V, established under agenda item 16 (paragraph 16.7), taking into account the comments and decisions made in plenary, to:

- .1 develop draft terms of reference for a correspondence group on marine plastic litter from ships, with a view to progressing the work set out in paragraph 7 of the scope of work of the PPR Sub-Committee in relation to marine plastic litter from ships (MEPC 74/18/Add.1, annex 21), taking into account document PPR 7/17;
- .2 finalize a draft MEPC circular to encourage Member States to provide adequate port reception facilities as required by regulation 8 of MARPOL Annex V, using annex 2 to document PPR 7/17/1 as a basis;
- .3 finalize a draft MEPC circular to encourage Member States and international organizations to undertake studies to better understand microplastics from ships and to share the results of any research conducted on marine litter, using annex 3 to document PPR 7/17/1 as a basis; and
- .4 review the draft amendments to the Procedures for port State control on the use of electronic record books, as set out in annex 15 to document PPR 5/24, that were not included by III 6 in the Procedures for port State control, with a view to advising MEPC 75, as appropriate.

Report of the Drafting Group on MARPOL Annexes IV and V

17.14 Having considered the part of the report of the Drafting Group on MARPOL Annexes IV and V dealing with this agenda item (PPR 7/WP.7, paragraphs 8 to 21, annexes 2, 3 and 4), the Sub-Committee took action as described in paragraphs 17.15 to 17.17.

Establishment of a correspondence group

17.15 The Sub-Committee established the Correspondence Group on Marine Plastic Litter from Ships, under the coordination of France,⁵ and instructed it, taking into account the comments and decisions made at PPR 7, document PPR 7/17 and any relevant documents submitted to MEPC and the PPR Sub-Committee associated with the *Action Plan to address marine plastic litter from ships* (resolution MEPC.310(73)), to:

- .1 consider how to amend MARPOL Annex V and the *2017 Guidelines for the implementation of MARPOL Annex V* (resolution MEPC.295(71)) to facilitate and enhance reporting of the accidental loss or discharge of fishing gear, as currently provided in regulation 10.6 of MARPOL Annex V, and consider the information to be reported to Administrations and IMO, the reporting mechanisms and the modalities; and
- .2 submit a written report to PPR 8.

MEPC circulars relating to marine plastic litter from ships

17.16 The Sub-Committee agreed to the draft MEPC circular on Provision of adequate facilities at ports and terminals for the reception of plastic waste from ships, as set out in annex 16, and the draft MEPC circular on Sharing of results from research on marine litter and encouraging studies to better understand microplastics from ships, as set out in annex 17, with a view to approval by MEPC 76.

⁵

Coordinator:

Mr. Philippe Janvier
Alternate Permanent Representative to IMO of France
Email: philippe.janvier@imofrance.org.uk
Tel: +44 (0) 20 7073 1384

Interim guidance on endorsing electronic Cargo Record Books

17.17 Having considered the outcome of the Drafting Group in relation to electronic record books, the Sub-Committee

- .1 endorsed the development of interim guidance for surveyors, including a sample form, to facilitate the endorsement of a cargo operation in an electronic Cargo Record Book;
- .2 invited III 7 to develop the above-mentioned interim guidance and consider whether there is a need to incorporate the guidance in the next revision of the Procedures for port State control; and
- .3 invited interested Member Governments and international organizations to submit concrete proposals to III 7 for the development of the interim guidance.

18 UNIFIED INTERPRETATION TO PROVISIONS OF IMO ENVIRONMENT-RELATED CONVENTIONS

18.1 The Sub-Committee had for its consideration document PPR 7/18 (IACS), containing the following IACS Unified Interpretations (UIs) for the NO_x Technical Code 2008:

- .1 IACS UI MPC33 Revision 2 (PPR 7/18, annex 1), regarding paragraph 2.2.4.1, concerning engines that undergo onboard certification and testing;
- .2 IACS UI MPC130 (PPR 7/18, annex 2), regarding paragraph 2.2.5.1, clarifying that a NO_x-reducing device (e.g. SCR) is recognized as a component of the engine and as such will not be covered by MARPOL Annex VI regulation 4 – Equivalents;
- .3 IACS UI MPC51 Revision 2 (PPR 7/18, annex 3), regarding paragraph 3.2.1, relating to engine test cycles and clarifying that only the E2 test cycle is applicable to engines operating in an Integrated Electric Propulsion (IEP) system, instead of D2 and E2; and
- .4 IACS UI MPC74 Revision 1 (PPR 7/18, annex 4), regarding paragraph 5.10.1, defining additional parameters which are beyond those in section 1 of appendix 5 of the NO_x Technical Code 2008, in order to get the "necessary data to fully define the engine performance and enable calculation of the gaseous emissions".

18.2 In the ensuing discussion, the Sub-Committee noted general support for IACS UI MPC 33 Revision 2, but also noted that the text interpreted in the unified interpretation should be the NO_x Technical Code 2008, as amended, instead of the 1997 version of the NO_x Technical Code, and could be better presented in a singular form. There was also general support for IACS UI MPC 74 Revision 1.

18.3 Following discussion, the Sub-Committee agreed, in principle, to the interpretations in IACS UI MPC33 and IACS UI MPC74 set out in annexes 1 and 4 to document PPR 7/18, respectively, and instructed the Working Group on Prevention of Air Pollution from Ships, to consider them further, with a view to preparing a final draft of the unified interpretations as an MEPC circular, for consideration by the Sub-Committee.

18.4 With regard to IACS UI MPC 130, some delegations expressed support for the IACS UI, noting that an equivalence to demonstrating compliance with the NO_x Technical Code was not possible, and agreeing that, in accordance with recent amendments to paragraph 2.2.5.1 of the NO_x Technical Code and the SCR Guidelines, the SCR must be considered as a component of the engine, and separate certification of the engine and the SCR was not possible.

18.5 However, the delegation of Sweden could not support IACS UI MPC 130, expressing the view that the interpretation of paragraph 2.2.5.1 was too restrictive and as such would hamper the development of technology and restrict the possibility for an Administration to approve equivalent methods which are not specifically defined in the NO_x Technical Code or the SCR Guidelines.

18.6 With regard to IACS UI MPC 51, some support for a technical review of the UI by the Working Group was expressed. However, the delegation of Finland could not support the IACS UI, noting that also other engine configurations should be clarified, and wider consistency could be achieved by having clearer definitions of test cycles in the NO_x Technical Code.

18.7 The delegation of the United States could also not support IACS UI MPC 51 expressing the view that it was in conflict with the test cycles in MARPOL Annex VI and would establish a new test cycle for engines used to generate electrical power for both propulsion and auxiliary use, which would require a new work output requesting an amendment to MARPOL Annex VI and the NO_x Technical Code 2008 to establish a new test cycle for certification.

18.8 In this regard, the Sub-Committee noted that IACS UI MPC130 and IACS UI MPC51 as set out in annexes 2 and 3 to document PPR 7/18, respectively, were not supported to become IMO unified interpretations, but would, along with IACS UI MPC33 Revision 2 and IACS UI MPC74 Revision 1, be uniformly implemented by IACS Societies from 1 July 2020, unless they were provided with written instructions to apply a different interpretation by the Administration on whose behalf they were authorized to act as a recognized organization.

Instructions to the Working Group on Prevention of Air Pollution from Ships

18.9 The Sub-Committee instructed the Working Group on Prevention of Air Pollution from Ships, established under agenda item 9 (see paragraph 9.5), taking into consideration the comments and decisions made in plenary, to finalize the draft unified interpretations of paragraphs 2.2.4.1 and 5.10.1 of the NO_x Technical Code 2008, using annexes 1 and 4 to document PPR 7/18 as a basis, respectively.

Report of the Working Group on Prevention of Air Pollution from Ships

18.10 Having considered the relevant parts of the report of the Working Group on Prevention of Air Pollution from Ships (PPR 7/WP.5, paragraphs 55 to 56 and annex 5), the Sub-Committee took action as described paragraph 18.11.

18.11 The Sub-Committee noted that the Working Group had finalized the draft unified interpretations of paragraphs 2.2.4.1 and 5.10.1 of the NO_x Technical Code 2008 and had included them in a draft MEPC circular, that also incorporated two previously approved unified interpretations to the NO_x Technical Code 2008 which had been issued as MEPC.1/Circ.865. Following consideration, the Sub-Committee agreed to the draft MEPC circular on unified interpretations to the NO_x Technical Code 2008, as amended, as set out in annex 18, with a view to approval at MEPC 76.

19 BIENNIAL AGENDA AND PROVISIONAL AGENDA FOR PPR 8

Biennial status report

19.1 The Sub-Committee recalled that MEPC 74 had approved the Sub-Committee's biennial status report for 2020 – 2021 and the provisional agenda for PPR 7.

19.2 The Sub-Committee also recalled that A 31 had adopted the *List of outputs for the 2020-2021 biennium* (resolution A.1131(31)).

19.3 Taking into account the progress made at this session, the Sub-Committee prepared the biennial status report, as set out in annex 19, for approval by MEPC 75.

Provisional agenda for PPR 8

19.4 Taking into account the progress made at this session and the relevant decisions of MEPC 74 and MSC 101, the Sub-Committee prepared the provisional agenda for PPR 8, as set out in annex 20 for consideration by MEPC 75.

Correspondence groups established at this session

19.5 The Sub-Committee established the following correspondence groups, due to report to PPR 8:

- .1 Correspondence Group on Review of the Biofouling Guidelines;
- .2 Correspondence Group on Development of Guidelines on Measures to Reduce Risks of Use and Carriage of Heavy Fuel Oil as Fuel by Ships in Arctic Waters;
- .3 Correspondence Group on Amendments to MARPOL Annex IV and Associated Guidelines;
- .4 Correspondence Group on Marine Plastic Litter from Ships; and
- .5 Correspondence Group on Black Carbon Emissions.

Arrangements for the next session

19.6 The Sub-Committee, taking into account the decisions made under the respective agenda items, anticipated that the following working, technical and drafting groups may be established at PPR 8:

- .1 Working Group on Marine Biosafety (agenda items 5, 6 and 7);
- .2 Working Group on Prevention of Air Pollution from Ships (agenda items 8, 9, 10 and 11);
- .3 Working Group on MARPOL Annexes IV and V (agenda items 13 and 14);
- .4 Technical Group on Evaluation of Safety and Pollution Hazards of Chemicals (agenda item 3); and
- .5 OPRC Drafting Group (Agenda items 4 and 12),

whereby the Chair, taking into account the submissions received on the respective subjects, would advise the Sub-Committee before PPR 8 on the final selection of such groups.

19.7 In this regard, the Sub-Committee also noted that due consideration would be given with regard to the principle established under paragraph 5.18 of the Committee's method of work (MSC-MEPC.1/Circ.5/Rev.1) when the final recommendation was made.

Intersessional meetings

19.8 The Sub-Committee noted that MEPC 74 had approved the holding of an intersessional meeting of the ESPH Working Group in 2020, which had been subsequently endorsed by C 122. The Sub-Committee invited MEPC 75 to approve the holding of an intersessional meeting of the ESPH Working Group in 2021.

Date for the next session

19.9 The Sub-Committee noted that the eighth session of the Sub-Committee had tentatively been scheduled to take place from 11 to 15 January 2021.

20 ELECTION OF CHAIR AND VICE-CHAIR FOR 2021

In accordance with the Rules of Procedure of the Marine Environment Protection Committee, the Sub-Committee unanimously re-elected Dr. F. Fernandes (Brazil) as Chair and Dr. A Mäkinen (Finland) as Vice-Chair, both for 2021.

21 ANY OTHER BUSINESS

Ballast water management matters

Revision of the Guidance for the commissioning testing of ballast water management systems

21.1 The Sub-Committee recalled that MEPC 74 had invited submissions to this session concerning proposals on any necessary changes to the *Guidance for the commissioning testing of ballast water management systems* (BWM.2/Circ.70) in light of the draft amendments to regulation E-1 of the BWM Convention, and had agreed for the outcome of PPR 7 on this issue to be reported to MEPC 75 as an urgent matter (MEPC 74/18, paragraph 4.57).

21.2 The Sub-Committee had for its consideration the following documents:

- .1 PPR 7/21/1 (InterManager), proposing changes to BWM.2/Circ.70 to increase the independence in commissioning testing, improve the sampling of organisms in the water at intake and discharge, and ensure that the discharge of Active Substances in the environment is limited;
- .2 PPR 7/21/3 (ICS), providing proposals for amendments to BWM.2/Circ.70 to ensure that the regime for ballast water sampling and indicative analysis during commissioning testing is appropriate and aligns with the objectives as originally envisaged by the Committee;
- .3 PPR 7/21/4 (Denmark), presenting some considerations towards a practical implementation of BWM.2/Circ.70, entailing a stepwise process including examination of the technical installation of the ballast water management system (BWMS) and testing the biological performance of the BWMS;

- .4 PPR 7/21/5 (China), commenting on document PPR 7/21/1 and containing several broad proposals on the overall approach in BWM.2/Circ.70; and
- .5 PPR 7/21/10 (Japan and United Arab Emirates), also commenting on document PPR 7/21/1 and containing several broad proposals on the overall approach in BWM.2/Circ.70.

21.3 In the ensuing discussion, the Sub-Committee considered the various issues addressed in these documents, including, inter alia, the source and quality of the uptake water; the level of detail and the objective of the analysis; and the size classes that should be tested.

21.4 With regard to the objective of the testing, the Sub-Committee agreed that the objective of commissioning testing was the verification of a successful installation of the BWMS and not of compliance with the D-2 standard. As for the level of detail of the analysis, the Sub-Committee reconfirmed that the analysis would be indicative.

21.5 On the issue of the source of the uptake water, the Sub-Committee agreed that commissioning testing should be conducted using ambient water. With regard to the size classes that should be tested, the Sub-Committee agreed that microbes should not be included in the testing, while with regard to the two size classes defined in regulation D-2, namely $\geq 50 \mu\text{m}$ and $\geq 10 \mu\text{m}$ to $< 50 \mu\text{m}$, the Sub-Committee agreed that this should be further considered in the Technical Group.

21.6 Other topics addressed during the discussion included the volume of the sample, who should conduct the commissioning testing, and the possible issuance of an interim certificate. There were no clear agreements on these topics and the Sub-Committee agreed that they should be further considered in the Technical Group.

21.7 In addition, noting the concerns expressed by some delegations about aspects of the proposals contained in document PPR 7/21/1, the Sub-Committee decided not to include this document in the terms of reference of the Technical Group.

21.8 In conclusion, the Sub-Committee instructed the Technical Group on Amendments to the AFS Convention to prepare, with a view to finalization, the draft revision of the *Guidance for the commissioning testing of ballast water management systems* (BWM.2/Circ.70) in light of the draft amendments to regulation E-1, taking into account comments and decisions made in plenary and the proposals in documents PPR 7/21/3, PPR 7/21/4, PPR 7/21/5 and PPR 7/21/10.

Development of a standard for verification of ballast water compliance monitoring systems

21.9 The Sub-Committee recalled that, following consideration of document MEPC 74/4/11 (Denmark), MEPC 74 had invited interested Member States and international organizations to submit concrete proposals for the development of a standard for verification of ballast water compliance monitoring systems to this session, taking into account the comments made by the Ballast Water Review Group at that session (MEPC 74/18, paragraph 4.60).

21.10 The Sub-Committee had for its consideration the following documents:

- .1 PPR 7/21 (IOC-UNESCO et al.), containing proposed text for a draft protocol for verifying ballast water compliance monitoring devices using laboratory and shipboard tests, intended to form the basis for the development of a standard for such devices;

-
- .2 PPR 7/21/2 (China), proposing to develop a measurement management system of ballast water rapid testing equipment as per ISO 10012:2003, and to determine quantitatively the category and quantity of indicator microbes to be tested in the indicative analysis;
 - .3 PPR 7/21/7 (IMarEST), commenting on document PPR 7/21 and offering a range of technical comments and proposals for consideration to support the development of a protocol;
 - .4 PPR 7/21/8 (Denmark), commenting on document PPR 7/21 and providing general comments on the proposed protocol; and
 - .5 PPR 7/21/9 (Denmark), commenting on document PPR 7/21 and providing specific comments on a number of paragraphs of the proposed protocol.

21.11 Owing to time constraints, the Sub-Committee was not able to consider this matter in time for it to be included in the terms of reference of the Technical Group on Amendments to the AFS Convention. However, noting that the Group did consider this matter informally, the Sub-Committee took action as described in paragraphs 21.35 to 21.37.

Other information

21.12 The Sub-Committee noted the information provided in document PPR 7/INF.8 (Republic of Korea) on the accuracy of the DPD method and the amperometric method for continuous flow measurement of total residual oxidants.

Air pollution matters

Proposed new output on amendments to regulation 13.2.2 of MARPOL Annex VI

21.13 The Sub-Committee recalled that MEPC 74 had:

- .1 considered document MEPC 74/14/4 (Norway), proposing a new output to amend regulation 13.2.2 of MARPOL Annex VI to clarify that the installation of a marine diesel engine replacing a boiler shall be considered a replacement engine;
- .2 noted the need for an in-depth technical consideration of the proposal in document MEPC 74/14/4, including the possibility of amendments to the *2013 Guidelines as required by regulation 13.2.2 in respect of non-identical replacement engines not required to meet the Tier III limit* (resolution MEPC.230(65)); and
- .3 referred document MEPC 74/14/4 to PPR 7 for further detailed consideration, with a view to advising MEPC 76 accordingly.

21.14 In addition to document MEPC 74/14/4, the Sub-Committee had for its consideration document PPR 7/2/4 (IMarEST), providing input to the technical discussion on amending regulation 13.2.2 of MARPOL Annex VI, including a proposal to add a new section in the *2013 Guidelines as required by regulation 13.2.2 in respect of non-identical replacement engines not required to meet the Tier III limit* (resolution MEPC.230(65)), and to amend regulation 13.2.2 to include a notification requirement for when a Tier II instead of a Tier III engine has been accepted to increase transparency, in particular for Parties situated in a NO_x Emission Control Area established under MARPOL Annex VI.

21.15 In the ensuing discussion, the Sub-Committee noted support for the proposals contained in document PPR 7/2/4, in particular, that the replacement of a steam boiler by an engine is a different scenario than for which the 2013 Guidelines were originally developed, and would require a substantial change of those Guidelines.

21.16 Following discussion, the Sub-Committee referred documents MEPC 74/14/4 and PPR 7/2/4 to the Working Group on Prevention of Air Pollution from Ships for further consideration, with a view to being advised by the Working Group on whether the proposed new output should be approved by the Committee, as well as whether the scope of work should also include amendments to the *2013 Guidelines as required by regulation 13.2.2 in respect of non-identical replacement engines not required to meet the Tier III limit* (resolution MEPC.230(65)).

Proposed amendments to the 2019 Guidelines for port State control under MARPOL Annex VI Chapter 3 (resolution MEPC.321(74)) to include provisions on energy efficiency for ships

21.17 The Sub-Committee recalled that MEPC 74 had invited Member Governments and international organizations to submit concrete proposals to PPR 7 for consideration, with a view to amending the *2019 Guidelines for port State control under MARPOL Annex VI chapter 3* (resolution MEPC.321(74)) to include guidelines for enforcement of MARPOL Annex VI requirements on energy efficiency for ships, including EEDI, Ship Energy Efficiency Management Plan (SEEMP) and the collection and reporting of ship fuel oil consumption data (MEPC 74/18, paragraph 5.119).

21.18 In this regard, the Sub-Committee had for its consideration document PPR 7/2/5 (IMarEST), providing input to further develop the *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* (resolution MEPC.321(74)) to additionally cover matters under chapter 4 of MARPOL Annex VI related to energy efficiency for ships, where compliance is indicated by having an International Energy Efficiency (IEE) Certificate, a Ship Energy Efficiency Management Plan (SEEMP), and a Statement of Compliance.

21.19 In the ensuing discussion, the Sub-Committee noted general support to amend the *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* to cover matters related to chapter 4, and the urgency of developing those amendments. Some delegations expressed concerns related to some of the proposals in document PPR 7/2/5, in particular with regards to the inspection of the EEDI Technical File.

21.20 Some delegations also expressed concerns about the Sub-Committee being tasked to develop amendments to the port State control guidelines, and expressed the view that it would be preferable that the III Sub-Committee would have a coordinating role in developing guidelines for PSC and amendments thereto. In that regard, the delegation of Belgium recalled the discussion during III 6 (III 6/15, paragraphs 5.4. to 5.9) on the *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* as adopted by resolution MEPC.321(74), and recalled that MSC 97 and MEPC 70 had endorsed that individual PSC guidelines should be developed under the coordination of the III Sub-Committee, and be appended to the Procedures for port State control rather than being issued as stand-alone instruments.

21.21 The Sub-Committee recalled that MEPC 74 had specifically invited concrete proposals regarding the inclusion of chapter 4 in the MARPOL Annex VI PSC Guidelines to be submitted to PPR 7. In this regard, the Sub-Committee also recalled that III 6 had invited PPR 7 to refer its future amendments to the *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* to III 7 for review, and to invite MEPC 76 to take into consideration that review by III 7.

21.22 Following discussion, the Sub-Committee instructed the Working Group on Prevention of Air Pollution from Ships to develop draft amendments to the *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* (resolution MEPC.321(74)) to cover matters related to energy efficiency of ships, taking into account document PPR 7/2/5, if time permitted.

Adjustment of onboard storage period of bunker samples for ships navigating on regular routes

21.23 The Sub-Committee recalled that MEPC 74 had referred document MEPC 74/17/1 (Republic of Korea), proposing a review on the need to adjust the retention period of the MARPOL delivered fuel oil sample in accordance with regulation 18.8.1 of MARPOL Annex VI for ships navigating on regular routes, to PPR 7 for further consideration.

21.24 In the ensuing discussion, the observer from IMarEST noted that regulation 18.8.1 of MARPOL Annex VI requires that the representative sample (MARPOL sample) be retained under the ship's control, whereas in contrast, regulation 18.6 requires the bunker delivery note to be retained on board the receiving ship. Therefore, it could be concluded that the MARPOL sample is not necessarily required to be retained on board throughout the overall required retention period, but could instead be kept in a suitable shore-based location under the ship's control. Furthermore, in case the provisions of regulation 18.11 of MARPOL Annex VI in respect of ships on scheduled services with frequent and regular port calls would apply, the Annex provides for agreed alternative approaches as regards the bunker delivery note requirements and therefore also the associated MARPOL samples.

21.25 The delegation of Korea noted that if the views of the observer of IMarEST were shared by the Sub-Committee, no additional clarification would be needed. Regardless, the Sub-Committee instructed the Working Group on Prevention of Air Pollution from Ships to further consider document MEPC 74/17/1 and advise the Sub-Committee on how best to proceed.

Experience with marine diesel engines equipped with SCR systems certified under MARPOL Annex VI

21.26 The Sub-Committee recalled that PPR 6, having considered documents PPR 6/19 (Norway) and PPR 6/19/1 (EUROMOT), had invited interested Member States and international organizations to report experiences with the operation of engine/SCR-systems certified under MARPOL Annex VI under the agenda item on "Any other business".

21.27 The Sub-Committee also recalled that PPR 6 had agreed that, should any interested Member Governments wish to amend the *2017 Guidelines addressing additional aspects to the NO_x Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with Selective Catalytic Reduction (SCR) Systems* (MEPC.291(71)), a proposal for a new work output should be submitted to a future session of MEPC in accordance with the Committees' method of work (MSC-MEPC.1/Circ.5/Rev.1), taking into account the comments made at PPR 6.

21.28 In this context, the Sub-Committee had for its consideration document PPR 7/21/6 (IACS), containing information on the experience of IACS members with respect to the certification of engine/SCR systems certified under MARPOL Annex VI.

21.29 The Sub-Committee noted the information provided by IACS in document PPR 7/21/6 and invited interested Member States and international organizations to continue to provide experience with marine diesel engines equipped with SCR systems, bearing in mind the recommendation of PPR 6 on a possible new output.

Instructions to the Technical Group on Amendments to the AFS Convention

21.30 The Sub-Committee instructed the Technical Group on Amendments to the AFS Convention, established under agenda item 6 (see paragraph 6.18), taking into account comments and decisions made in plenary, to prepare, with a view to finalization, the draft revision of the *Guidance for the commissioning testing of ballast water management systems* (BWM.2/Circ.70) in light of the draft amendments to regulation E-1 of the BWM Convention, taking into account the proposals in documents PPR 7/21/3, PPR 7/21/4, PPR 7/21/5 and PPR 7/21/10.

Instructions to the Working Group on Prevention of Air Pollution from Ships

21.31 The Sub-Committee instructed the Working Group on Prevention of Air Pollution from Ships, established under agenda item 9 (see paragraph 9.5), taking into consideration the comments and decisions made in plenary, to:

- .1 further consider documents MEPC 74/14/4 and PPR 7/2/4 and advise the Sub-Committee on whether the proposed new output should be approved by the Committee, as well as whether the scope of work should also include amendments to the *2013 Guidelines as required by regulation 13.2.2 in respect of non-identical replacement engines not required to meet the Tier III limit* (resolution MEPC.230(65));
- .2 if time permits, develop draft amendments to *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* (resolution MEPC.321(74)) to cover matters related to energy efficiency of ships, taking into account document PPR 7/2/5; and
- .3 further consider document MEPC 74/17/1 and advise the Sub-Committee on how best to proceed.

Report of the Technical Group Amendments to the AFS Convention

21.32 Having considered the relevant parts of the report of the Technical Group (PPR 7/WP.4/Add.1, paragraphs 26 to 38 and annexes 5 and 6), the Sub-Committee took action as described in paragraphs 21.33 to 21.37.

Revision of the Guidance for the commissioning testing of ballast water management systems

21.33 The Sub-Committee agreed to the draft text for the revision of the *Guidance for the commissioning testing of ballast water management systems*, as set out in annex 21, and invited MEPC 75 to approve the revised circular for dissemination as BWM.2/Circ.70/Rev.1.

21.34 In this context, the Sub-Committee invited the Committee to instruct the Sub-Committee on Implementation of IMO Instruments, in the context of the next revision of the Harmonized System of Survey and Certification (HSSC), to amend the paragraphs of the HSSC relating to BWMS commissioning testing to ensure that they do not contain references to compliance with regulation D-2.

Development of a standard for verification of ballast water compliance monitoring systems

21.35 In considering how to progress the work on the development of a standard for verification of ballast water compliance monitoring systems, taking into account the text set out in annex 6 to document PPR 7/WP.4/Add.1, some delegations, noting a proposal by the Chair

to continue this work at PPR 8, expressed the view that this matter should be progressed as soon as possible in light of its links to BWMS commissioning testing and proposed that it should be referred to MEPC 75, if possible.

21.36 The Sub-Committee noted that this would not be possible, as this matter had not been included by MEPC 74 in the urgent matters to be reported by this session to MEPC 75. However, the Sub-Committee also noted that interested Member States and international organizations could submit documents on this matter to MEPC 76, including a more developed draft to facilitate consideration by the Committee. In this regard, some delegations stated their willingness to work together intersessionally to that end.

21.37 In light of the above, the Sub-Committee invited interested Member States and international organizations to submit further proposals on the development of a standard for verification of ballast water compliance monitoring systems to MEPC 76, using annex 6 to document PPR 7/WP.4/Add.1 as the basis. The Sub-Committee also forwarded documents PPR 7/21, PPR 7/21/2, PPR 7/21/7, PPR 7/21/8 and PPR 7/21/9 to PPR 8 for further consideration, if required, along with the outcome of MEPC 76.

Report of the Working Group on Prevention of Air Pollution from Ships

21.38 Having considered the relevant parts of the report of the Working Group on Prevention of Air Pollution from Ships (PPR 7/WP.5, paragraphs 57 to 61), the Sub-Committee took action as described in paragraphs 21.39 to 21.42.

Proposed new output on amendments to regulation 13.2.2 of MARPOL Annex VI

21.39 Following consideration of documents MEPC 74/14/4 and PPR 7/2/4, concerning the replacement of a boiler by a marine diesel engine, the Sub-Committee agreed to advise MEPC 76 that the new output proposed in document MEPC 74/14/4 should be approved, and that the scope of the output should also include the development of consequential amendments to the *2013 Guidelines as required by 13.2.2 of MARPOL Annex VI in respect of non-identical replacement engines not required to meet the Tier III limit* (resolution MEPC.230(65)).

Proposed amendments to the 2019 Guidelines for port State control under MARPOL Annex VI Chapter 3 (resolution MEPC.321(74)) to include provisions on energy efficiency for ships

21.40 With regard to document PPR 7/2/5, proposing amendments to *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* (resolution MEPC.321(74)) to include provisions concerning chapter 4 (Regulations on energy efficiency for ships) of MARPOL Annex VI, the Sub-Committee noted an intervention by the delegation of Belgium commenting on the procedure for further developing the above-mentioned PSC Guidelines, taking into consideration the *Strategic plan for the organization for the six-year period 2018 to 2023* (resolution A.1110(30)), and the need for clarification and communication on these procedures to all concerned Committees and Sub-Committees (see also paragraphs 21.20 and 21.21). As requested, the full statement by the delegation of Belgium is set out in annex 22.

21.41 Following consideration, the Sub-Committee agreed in general on the need to amend the MARPOL Annex VI PSC Guidelines to include provisions relating to chapter 4, but owing to time constraints was not able to review the proposals in document PPR 7/2/5. Consequently, the Sub-Committee invited III 7 to review document PPR 7/2/5, with a view to developing appropriate amendments to the *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* (resolution MEPC.321(74)).

Adjustment of onboard storage period of bunker samples for ships navigating on regular routes

21.42 With regard to document MEPC 74/17/1 on the onboard storage period of bunker samples for ships navigating on regular routes, the Sub-Committee noted that the delegation of the Republic of Korea required no further discussion in the Working Group, as the discussion in the Sub-Committee had already clarified the matter (see paragraphs 21.23 to 21.25).

22 ACTION REQUESTED OF THE COMMITTEES

- 22.1 The Marine Environment Protection Committee, at its seventy-fifth session, is invited to:
- .1 note the finalization of the revision of GESAMP Reports and Studies No.64, which has been published as GESAMP Reports and Studies No.102 (GESAMP Hazard Evaluation Procedure for Chemicals carried by Ships, 2019) and includes a reassigned column E1 and a sub-categorization of column C3 of the GESAMP Hazard Profile table (paragraphs 3.2 and 3.3);
 - .2 request the Secretariat to prepare draft amendments to appendix I of MARPOL Annex II that are consequential to the refinement of column C3 and the reassignment of column E1 of the GESAMP Hazard Profile table, and submit them to MEPC 76 with a view to approval and subsequent circulation (paragraph 3.4);
 - .3 approve, subject to concurrent approval by MSC 102, the draft revised MSC-MEPC.5/Circ.7 on Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code (paragraph 3.6 and annex 1);
 - .4 concur with the evaluation of products and their respective inclusion in lists 1, 3 and 5 of MEPC.2/Circ.25 (issued on 1 December 2019), with validity for all countries and with no expiry date where appropriate (paragraph 3.7.1);
 - .5 concur with the evaluation of cleaning additives and their inclusion in annex 10 of MEPC.2/Circ.25 (paragraph 3.7.2);
 - .6 concur with the evaluation products and their inclusion in list 3 of the next revision of the MEPC.2/Circular (i.e. MEPC.2/Circ.26, to be issued in December 2020), with validity for all countries and with no expiry date (paragraph 3.40.1);
 - .7 request GESAMP/EHS 57 to provide advice on how to best assess mixtures against the discharge criteria in new paragraph 7.1.4 of regulation 13 MARPOL Annex II (paragraph 3.40.2);
 - .8 concur with the evaluation of cleaning additives and their inclusion in annex 10 of the next revision of the MEPC.2/Circular (3.40.3);
 - .9 endorse the addition of a distinguishing qualifier to the product name included in list 1 of the MEPC.2/Circular when products that are already listed in the IBC Code are reassessed (3.42);

-
- .10 endorse, subject to concurrent decision by MSC 102, the draft PPR.1 circular on Revised carriage requirements for methyl acrylate and methyl methacrylate (paragraph 3.44 and annex 2);
 - .11 concur with the recommendation of the Sub-Committee that chapter 17 of the IBC Code should be amended to include:
 - .1 the updated carriage requirements for methyl acrylate and methyl methacrylate (paragraph 3.45.1); and
 - .2 special requirement 16.2.7 in Pollution Category Y n.o.s. entries (paragraph 3.45.2);
 - .12 note the report of the Technical Group on Amendments to the AFS Convention (paragraph 6.20 and annex 6);
 - .13 consider the draft amendments to Annexes 1 and 4 to the AFS Convention, decide on the preferred option in square brackets, and approve the draft amendments with a view to subsequent adoption (paragraphs 6.22 and 6.25 and annexes 1 and 3 to annex 6);
 - .14 agree to the two draft operative paragraphs to be included in the requisite resolution on adoption of the amendments to the AFS Convention (paragraph 6.24 and annex 7);
 - .15 encourage Member States to conduct baseline studies prior to the entry into force of controls on cybutryne, in order to allow the subsequent determination of the effectiveness of the controls (paragraph 6.26);
 - .16 request the governing bodies of the London Convention and Protocol, at their next meeting, to consider a revision of the *Revised guidance on best management practices for removal of anti-fouling coatings from ships, including TBT hull paints* (LC-LP.1/Circ.31/Rev.1), in light of the introduction of controls on cybutryne under the AFS Convention, with a view to updating the guidance contained in AFS.3/Circ.3/Rev.1 (paragraph 6.27);
 - .17 note the need to consider an update to the list of items to be listed in the Inventory of Hazardous Materials under the Hong Kong Convention to include cybutryne when the respective controls enter into force, and take action as appropriate (paragraph 6.28);
 - .18 approve the draft MEPC circular on Guidelines for onboard sampling of fuel oil intended to be used or carried for use on board a ship (paragraph 9.8 and annex 8);
 - .19 approve the draft MEPC resolution on the 2020 Guidelines for exhaust gas cleaning systems (paragraph 11.17.1 and annex 9);
 - .20 approve the draft revised MEPC circular on *Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument, and recommended actions to take if the exhaust gas cleaning system (EGCS) fails to meet the provisions of the EGCS Guidelines*, for dissemination as MEPC.1/Circ.883/Rev.1 (paragraph 11.17.2 and annex 10);

- .21 approve the revised title (Evaluation and harmonization of rules and guidance on the discharge of discharge water from EGCS into the aquatic environment) and scope of work for output 1.23 (paragraph 12.12 and annex 11);
 - .22 request the Secretariat to explore the possibility of involving GESAMP to provide scientific advice, for and during the development of different elements of the agreed scope of work for output 1.23, as appropriate (paragraph 12.13.1);
 - .23 invite interested Member Governments and international organizations to submit proposals and comments to PPR 8 in accordance with the scope of work for output 1.23 (paragraph 12.13.2);
 - .24 approve the biennial status report of the Sub-Committee for the current biennium and the provisional agenda for PPR 8 (paragraphs 19.3 and 19.4 and annexes 18 and 19, respectively);
 - .25 approve the holding of an intersessional meeting of the ESPH Technical Group in 2021 (paragraph 19.8);
 - .26 approve the draft revised BWM circular on *Guidance for the commissioning testing of ballast water management systems* for dissemination as BWM.2/Circ.70/Rev.1 (paragraph 21.33 and annex 21);
 - .27 instruct the III Sub-Committee, in the context of the next revision of the Survey Guidelines under the Harmonized System of Survey and Certification (HSSC), to amend the paragraphs of the HSSC relating to the commissioning testing of ballast water management systems to ensure that there are no references to compliance with regulation D-2 (paragraph 21.34).
- 22.2 The Marine Environment Protection Committee, at its seventy-sixth session, is invited to:
- .1 endorse the draft PPR.1 circular on *Re-submission of products listed in lists 2 and 3 of the MEPC.2/Circular on Provisional categorization of liquid substances in accordance with MARPOL Annex II and the IBC Code*, which sets the deadline for evaluating the products would be 31 December 2025 (paragraphs 3.46 and 3.47 and annex 3);
 - .2 endorse the Sub-Committee's recommendation that the existing entries for the paraffin-like products listed in paragraph 5 of MEPC.1/Circ.886 could be retained on the ship's Certificate of Fitness, even if the renamed and reassessed products were listed in the addendum to the ship's Certificate, since the product names used in the IBC Code and in list 1 of the MEPC.2/Circular were different (paragraph 3.49);
 - .3 approve the draft amendments to the *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)*, for inclusion in a revised circular to be disseminated as BWM.2/Circ.42/Rev.2 (paragraph 4.7 and annex 5);
 - .4 note the deliberations of the Sub-Committee in respect of reducing the impact on the Arctic of Black Carbon emissions from international shipping (paragraphs 8.3 to 8.10), in particular that the Sub-Committee:

-
- .1 noted that Black Carbon emissions from international shipping depended on many factors, inter alia, type of engine, fuel formulation, engine load, and engine maintenance, that more information was required on the composition of the fuel oils compliant with the 0.50% m/m sulphur limit under MARPOL Annex VI, and that more research might be necessary (paragraph 8.8);
 - .2 requested ISO to provide an update to PPR 8 on its consideration on if it was possible to add a further measure to what was already included in the ISO 8217 standard with a view to providing an approximate indication as to whether a fuel oil was more aromatic or more paraffinic (paragraph 8.9);
 - .3 agreed to the draft terms of reference for output 3.3, as set out in paragraph 5 of document MEPC 74/10/8, on the basis that action considered under the output could include non-mandatory instruments such as guidance (paragraph 8.10);
 - .5 approve the draft amendments to MARPOL Annex I to incorporate a prohibition on the use and carriage for use as fuel of heavy fuel oil by ships in Arctic waters, with a view to subsequent adoption (paragraph 14.24 and annex 12);
 - .6 consider the draft MEPC circular on the 2020 Guidelines for systems for handling oily wastes in machinery spaces of ships incorporating guidance notes for an integrated bilge water treatment system (IBTS), as set out in annex 13, the draft amendments to appendix II (Form of the IOPP certificate and Supplements) and appendix III (Form of Oil Record Book) of MARPOL Annex I, as set out in annex 14, and the draft revised MEPC circular on *Guidance for the recording of operations in the Oil Record Book Part I – machinery space operations (all ships)*, as set out in annex 15, as a package, and decide on whether they can be approved (paragraph 15.10 and annexes 13, 14 and 15);
 - .7 approve draft MEPC circular on Provision of adequate facilities at ports and terminals for the reception of plastic waste from ships (paragraph 17.16 and annex 16);
 - .8 approve the draft MEPC circular on Sharing of results from research on marine litter and encouraging studies to better understand microplastics from ships (paragraph 17.16 and annex 17);
 - .9 with regard to the draft amendments to the Procedures for port State control on the use of electronic record books that were not included by III 6 in the corresponding draft Assembly resolution:
 - .1 endorse the development of an interim guidance for surveyors, including a sample form to facilitate the endorsement of a cargo operation in an electronic Cargo Record Book (paragraph 17.17.1); and

- .2 note that III 7 was invited to develop the interim guidance and to consider whether there is a need incorporate the guidance in the next revision of the Procedures for PSC (paragraph 17.17.2);
 - .10 approve the draft MEPC circular on Unified interpretations to the NO_x Technical Code 2008, as amended (paragraph 18.11 and annex 18);
 - .11 confirm the biennial status report of the Sub-Committee for the current biennium and the provisional agenda for PPR 8 (paragraphs 19.3 and 19.4 and annexes 18 and 19, respectively);
 - .12 note the Sub-Committee's advice that the output proposed in document MEPC 74/14/4 (Norway) to revise regulation 13.2.2 of MARPOL Annex VI to clarify that a marine diesel engine replacing a boiler shall be considered a replacement engine should be approved and the scope of the output should also include the development of consequential amendments to the 2013 Guidelines as required by 13.2.2 of MARPOL Annex VI in respect of non-identical replacement engines not required to meet the Tier III limit (resolution MEPC.230(65)) (paragraph 21.39);
 - .13 note that III 7 was invited to review document PPR 7/2/5 (IMarEST), with a view to developing appropriate amendments to the *2019 Guidelines for port State control under MARPOL Annex VI Chapter 3* (resolution MEPC.321(74)) to include provisions relating to chapter 4 of MARPOL Annex VI (paragraph 21.41);
 - .14 note that the Sub-Committee considered document MEPC 74/17/1 (Republic of Korea) regarding the onboard storage period of bunker samples for ships navigating on regular routes, and that following the clarification provided during the discussions no further consideration of the document is required (paragraph 21.42); and
 - .15 approve the report in general.
- 22.3 The Maritime Safety Committee, at its 102nd session, is invited to:
- .1 approve, subject to concurrent approval by MEPC 75, the draft revised MSC-MEPC.5/Circ.7 on *Guidance on the timing of replacement of existing certificates by revised certificates as a consequence of the entry into force of amendments to chapters 17 and 18 of the IBC Code* (paragraph 3.6 and annex 1);
 - .2 endorse, subject to concurrent decision by MEPC 75, the draft PPR.1 circular on Revised carriage requirements for methyl acrylate and methyl methacrylate (paragraph 3.44 and annex 2); and
 - .3 concur with the recommendation of the Sub-Committee that chapter 17 of the IBC Code should be amended to include the updated carriage requirements for methyl acrylate and methyl methacrylate (paragraph 3.45.1).

ANNEXES

(The annexes to this report have been issued as document PPR 7/22/Add.1)
