

SUB-COMMITTEE ON POLLUTION
PREVENTION AND RESPONSE
1st session
Agenda item 16

PPR 1/WP.1
7 February 2014
Original: ENGLISH

DISCLAIMER

As at its date of issue, this document, in whole or in part, is subject to consideration by the IMO organ to which it has been submitted. Accordingly, its contents are subject to approval and amendment of a substantive and drafting nature, which may be agreed after that date.

DRAFT REPORT TO THE MARINE ENVIRONMENT PROTECTION COMMITTEE

1 GENERAL

1.1 The Sub-Committee on Pollution Prevention and Response (PPR) held its first session from 3 to 7 February 2014 under the chairmanship of Mr. Sveinung Oftedal (Norway), who was unanimously elected as Chairman for 2014 at the opening of the session. The Vice-Chairman, Dr. Flavio Fernandes (Brazil), who was unanimously elected as Vice-Chairman for 2014 at the opening of the session, was also present.

1.2 The session was attended by delegations from Member Governments and observers from international organizations and non-governmental organizations in consultative status as listed in document PPR 1/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/MediaCentre/SecretaryGeneral/Secretary-GeneralsSpeechesToMeetings/Pages/Default.aspx>

Chairman's remarks

1.4 In responding, the Chairman 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.

Adoption of the agenda and related matters

1.5 The Sub-Committee adopted the agenda (PPR 1/1) and agreed to be guided in its work, in general, by the annotations contained in document PPR 1/1/1 and the proposed arrangements for the session set out in document PPR 1/1/2. The agenda, as adopted, together with the list of documents considered under each agenda item, is set out in document PPR 1/INF[...].

2 DECISIONS OF OTHER IMO BODIES

2.1 The Sub-Committee noted the outcomes of MEPC 65, MSC 92, C/ES.27 and A 28 relevant to the work of the Sub-Committee, as reported in documents PPR 1/2 and PPR 1/2/1 (Secretariat) and took them into account in its deliberations when dealing with the relevant agenda items.

2.2 The Sub-Committee noted, in particular, that the twenty-eighth regular session of the Assembly had adopted the *Strategic Plan for the Organization* (for the six-year period 2014 to 2019) (resolution A.1060(28)) and the *High-level Action Plan of the Organization and Priorities for the 2014-2015 Biennium* (resolution A.1061(28)) (see also paragraph 13.1).

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

Outcomes of MEPC 65 and MSC 92

3.1 The Sub-Committee noted that MSC 92 and MEPC 65 had endorsed the actions taken by BLG 17 in relation to the report of ESPH 18 and had approved the work programme for ESPH 19. Additionally, both Committees had approved the holding of an intersessional meeting of the ESPH Working Group in 2014.

3.2 The Sub-Committee also noted that MSC 92 and MEPC 65 had approved draft amendments to the IBC Code, as well as 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*.

Evaluation of new products

3.3 The Sub-Committee agreed to refer documents PPR 1/3/1 (United States), PPR 1/3/2 (United States), PPR 1/3/3 (Denmark, Netherlands, Norway, Poland, Sweden and United Kingdom), PPR 1/3/4 (South Africa), PPR 1/3/5 (Italy), PPR 1/3/6 (Italy), PPR 1/3/7 (Italy), PPR 1/3/8 (Italy), and PPR 1/3/9 (Italy), containing information for the evaluation of new products, and document PPR 1/3/11 (INTERTANKO), concerning the review of products requiring oxygen-dependent inhibitors and proposals to amend MSC/Circ.879-MEPC/Circ.348, directly to the ESPH Working Group for evaluation, having noted that these pertained to routine tasks of the Working Group or issues related to ongoing work items.

Report of ESPH 19

3.4 The Sub-Committee recalled that the nineteenth session of the ESPH Working Group had taken place from 21 to 25 October 2013 and the report of that session was circulated as document PPR 1/3.

3.5 Having considered the report of the ESPH Working Group, the Sub-Committee approved it in general and, in particular:

- .1 agreed to the evaluation of new products and their consequential inclusion in the IBC Code;
- .2 concurred with the proposed amendments to the current entry for poly(4+) isobutylene in chapter 17 of the IBC Code;
- .3 agreed to a new entry in chapter 17 of the IBC Code for poly(4+)isobutylene, as a pollution category X, and the addition of "Highly-Reactive Polyisobutylene" as a synonym in chapter 19 of the IBC Code;
- .4 concurred with the results of the evaluation of cleaning additives;
- .5 agreed to the evaluation of trade-named mixtures representing safety hazards and their consequential inclusion in list 3 of the MEPC.2/Circular, with validity for all countries and no expiry date;

- .6 noted the review of the draft of MEPC.2/Circ.19 undertaken and the resulting amendments and deletion of products from the lists that had reached their expiry dates;
- .7 noted the outcome of the GESAMP/EHS 50 meeting, in particular the finalization of the work on the revision of GESAMP Reports and Studies No.64 that was subsequently approved at GESAMP 40;
- .8 concurred with the deletion of the asterisk at the end of paragraph 15.3.5.1 of the recent amendments to the IBC Code (Circular Letters Nos. 3370 and 3405) and agreed to refer the matter to MEPC 66 and MSC 93 accordingly;
- .9 noted the progress made on the revision of chapter 21 of the IBC Code and that this work would continue at this session of the Sub-Committee;
- .10 noted the revision of the PPR Product Data Reporting Form (previously the BLG Product Data Reporting Form);
- .11 noted the discussions with regard to consequences of the discharge of high-viscosity products, based on a number of recent incidents;
- .12 concurred with the proposed update of the MEPC.2/Circular and BLG.1/Circ.17 to provide guidance with regard to the naming protocol for trade-named products; and
- .13 approved the proposed future planned output of the ESPH Working Group and the provisional scheduling of ESPH 20 from 29 September to 3 October 2014.

Issues related to the discharge of high-viscosity and persistent floating products

3.6 The Sub-Committee considered document PPR 1/3/3 (Denmark, Norway, Poland, Sweden, Netherlands and United Kingdom), regarding the ongoing issues related to high-viscosity and persistent floating products that are discharged in accordance with MARPOL Annex II requirements, but which are solidifying and coming ashore in the northern European region (along coastlines bordering the North Sea, Baltic Sea, Black Sea and the English Channel).

3.7 In its introduction of the document, the delegation of the United Kingdom clarified that whilst the proposal contained in document PPR 1/3/3 had suggested inviting Member States to submit a proposal to MEPC requesting an unplanned output, they had since noted that in accordance with the *High-level Action Plan of the Organization and Priorities for the 2015-2016 Biennium* (resolution A.1061(28)), this work would fall within the scope of output 7.2.2.1 *Safety and pollution hazards of chemicals and preparation of consequential amendments to MARPOL Annex II and the IBC Code, taking into account recommendations of GESAMP-EHS*, which was agreed by the Sub-Committee.

3.8 One delegation noted that in its introduction, the delegation of the United Kingdom had made reference to a review of regulation 4.1.3 of MARPOL Annex II as part of the proposal, but that this was not referenced anywhere in the document under consideration. It was further emphasized that any consideration of a change to this regulation may result in a substantial amendment to MARPOL Annex II, thus constituting an unplanned output.

3.9 The Sub-Committee, having discussed the matter, determined that there was no proposal to amend MARPOL Annex II as such and, therefore, agreed to refer the document to the ESPH Working Group for further consideration, requesting it to also consider the implications of regulation 4.1.3 of MARPOL Annex II on this topic, and to provide advice to the Sub-Committee, taking into account the comments made in plenary.

Clarification on the use of generic cleaning products

3.10 The Sub-Committee, having considered document PPR 1/3/10 (IPTA), containing a proposal providing clarification on the use of generic tank cleaning products, and having concurred with the proposal in principle, agreed to refer this matter to the ESPH Working Group for further consideration.

Establishment of the working group

3.11 The Sub-Committee established the Working Group on Evaluation of Safety and Pollution Hazards of Chemicals (ESPH) and instructed it, taking into account the report of ESPH 19 (PPR 1/3) and the comments and decisions made in plenary, to:

- .1 consider issues relating to the evaluation of new products, taking into account documents PPR 1/3/1, PPR 1/3/2, PPR 1/3/4, PPR 1/3/5, PPR 1/3/6, PPR 1/3/7, PPR 1/3/8 and PPR 1/3/9;

- .2 conduct an evaluation of cleaning additives;
- .3 review the MEPC.2/Circular – Provisional classification of liquid substances transported in bulk, and other related matters;
- .4 further review the safety criteria guidelines in chapter 21 of the IBC Code to address inconsistencies in chapters 17 and 18;
- .5 further review the products requiring oxygen-dependent inhibitors, taking into consideration document PPR 1/3/11;
- .6 consider the issues related to the discharge of high-viscosity and persistent floating products, based on document PPR 1/3/3, and make a recommendation to the Sub-Committee, accordingly;
- .7 consider the proposal by IPTA (PPR 1/3/10) for clarification on the use of generic cleaning products;
- .8 prepare the future planned output and agenda for ESPH 20; and
- .9 submit a written report to plenary by Friday, 7 February 2014.

Report of the ESPH Working Group

3.12 Having considered the report of the ESPH Working Group (PPR 1/WP.3), the Sub-Committee approved it in general and, in particular:

(To be prepared by the Secretariat, in consultation with the Chairman, after the session based on the report of the group and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions)

4 DEVELOPMENT OF A CODE FOR THE TRANSPORT AND HANDLING OF LIMITED AMOUNTS OF HAZARDOUS AND NOXIOUS LIQUID SUBSTANCES IN BULK ON OFFSHORE SUPPORT VESSELS

4.1 The Sub-Committee recalled that BLG 17 had re-established the Correspondence Group on the Development of the OSV Chemical Code and instructed it to further develop the text of the draft Code.

4.2 The Sub-Committee also recalled that BLG 16 had sought advice from the SLF Sub-Committee on damage stability standards for offshore support vessels (OSVs) carrying limited amounts of hazardous and noxious liquid substances in bulk (see paragraph 4.5)

Report of the correspondence group

4.3 In considering the report of the correspondence group (PPR 1/4/1, submitted by Denmark), the Sub-Committee noted, in particular, that the group had made progress on chapters 2 (Survival capability and location of cargo tanks), 3 (Ship design), 5 (Cargo transfer), 8 (Firefighting requirements) and 12 (Special requirements); however, had not been able to prepare a complete draft owing to time constraints and various outstanding issues.

4.4 Having noted the general support for the text prepared by the correspondence group, but also concerns over the perceived excessive restrictions on traditional offshore support vessels carrying more benign products, such as drilling muds, the Sub-Committee referred document PPR 1/4/1 to the Working Group on the OSV Chemical Code for further development of the draft Code.

Outcome of SLF 55

4.5 The Sub-Committee, having considered document PPR 1/4 (Secretariat), containing the outcome of SLF 55 concerning a damage stability standard for offshore support vessels carrying limited amounts of hazardous and noxious liquid substances in bulk, agreed to refer the document to the working group for further consideration..

4.6 In this connection, the Sub-Committee noted concerns that the damage stability standard proposed by SLF does not adequately address additional risks associated with the carriage of large volumes of severely hazardous products.

Establishment of the Working Group on the Development of the OSV Chemical Code

4.7 The Sub-Committee established the Working Group on the Development of the OSV Chemical Code and instructed it, taking into account the comments, proposals and decisions made in plenary, to:

- .1 further develop the draft Code for the transport and handling of limited

amounts of hazardous and noxious liquid substances in bulk on offshore support vessels (OSV Chemical Code), on the basis of documents PPR 1/4 and PPR 1/4/1, and in particular:

- .1 focus on preparing chapter 2 on survival capability and location of cargo tanks, chapter 3 on ship design and chapter 5 on cargo transfer, with a view to forwarding the draft text to the SDC Sub-Committee for advice and input; and preparing chapter 8 on firefighting requirements, with a view to forwarding the draft text to the SSE Sub-Committee for advice and input; and
- .2 if time allows, prepare the draft text of the remaining chapters of the OSV Chemical Code;
- .2 consider whether the correspondence group should be re-established to finalize the draft OSV Chemical Code; and if so, develop draft terms of reference for the group; and
- .3 submit a written report to plenary by Friday, 7 February 2014.

Report of the working group

4.8 Having considered the report of the working group (PPR 1/WP.4), the Sub-Committee approved it in general and took action as indicated hereunder.

(To be prepared by the Secretariat, in consultation with the Chairman, after the session based on the report of the group and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions)

5 ADDITIONAL GUIDELINES FOR IMPLEMENTATION OF THE BWM CONVENTION

5.1 The Sub-Committee noted that, since BLG 17, two more States (Germany and Switzerland) had acceded to the Ballast Water Management Convention, bringing the number of Contracting Governments to 38, representing 30.38% of the world's tonnage of merchant ships. The Sub-Committee urged the other Member States to consider ratifying or acceding to the Convention at their earliest convenience.

5.2 In this connection, the Sub-Committee noted that the Assembly, at its twenty-eighth regular session, had adopted resolution A.1088(28) on *Application of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004*, with a view to providing certainty and confidence in the application of the BWM Convention, thereby assisting shipping industries in the timely planning of their operations and encouraging the early installation of ballast water management systems.

Development of a BWM circular on guidance on the use of ballast water management systems during stripping operations

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

- .1 PPR 1/5 (France and Norway), seeking clarification on the usage of ballast water management systems during stripping operations; and
- .2 PPR 1/5/2 (Canada), containing a draft BWM circular on guidance on the use of ballast water management systems during stripping operations.

5.4 In the ensuing discussion, the Sub-Committee noted support for the development of guidance on the use of ballast water management systems during stripping operations, but also noted the concerns over the scope of the draft guidance, as well as possible technical challenges with regard to ballast water sampling and the compatibility and relationship of the draft guidance with the provisions of the BWM Convention and relevant guidelines.

5.5 The observer from IFSMA stated that, while welcoming the draft guidance, they had concerns that the human element has not been given sufficient consideration, in particular with regard to safety, health and additional workload for ship masters.

5.6 After extensive discussion, the Sub-Committee agreed, in principle, to the following modifications to the text of the draft guidance contained in the annex to document PPR 1/5/2:

- .1 to add the words "using eductors" at the end of the title of the draft guidance;
- .2 to delete paragraph 10; and

- .3 to replace the bullet points in paragraph 13 with the following:
- .1 use of completely managed water as source of drive water (such as from another ballast tank);
 - .2 where possible, arrange sampling points appropriately so that all managed water can be sampled before mixing with eductor drive water; and
 - .3 when ballast water is treated with a disinfectant chemical or other conditioning treatment at uptake only and the monitored discharge proves there is no need for the application of a neutralizer chemical to condition the discharge for environmental acceptability, then following the discharge of the bulk of the ballast water from a tank or group of tanks through the ballast water main system, then it is accepted that the remainder of the ballast water in the tanks will also be compliant and may be discharged via an eductor system using local water as motive water without additional monitoring.

5.7 Following the discussion, the Sub-Committee instructed a drafting group to prepare a draft BWM circular on guidance on the use of ballast water management systems during stripping operations, using the text in document PPR 1/5/2, as further modified (see paragraph 5.6), as the basis. In this context, the Sub-Committee also instructed the drafting group to ensure that the draft guidance is fully in line with the provisions of the BWM Convention and relevant guidelines.

Use of fresh water as ballast water

5.8 The Sub-Committee recalled that MEPC 65 had approved an action plan, as set out in paragraph 24 of document MEPC 65/WP.7/Rev.1, with respect to the use of drinking water as ballast water. The action plan, inter alia, invites Administrations to propose criteria required to allow a ballast water tank to receive drinking water and to examine the effects of long- and short-term storage of drinking water in that tank.

5.9 In considering document PPR 1/5/1 (Norway) on the use of fresh water as ballast water and implications for corrosion protection in ballast tanks, the Sub-Committee noted that

the view of most of the delegations that spoke was that, while fresh water may pose a potential risk of enhanced corrosion in ballast tanks, long experience with using ballast water from lakes, rivers and other fresh water sources does indicate that additional corrosion effects, if at all evidenced, were minimal and did not need to be further considered.

5.10 Consequently, the Sub-Committee agreed that no further action in the matter was necessary and invited interested Member Governments and international organizations who wished to pursue the issue further to submit relevant information and proposals to the MSC or the SDC Sub-Committee, as appropriate, since corrosion matters are in the remit of those IMO bodies.

Information concerning ballast water sampling, analysis and port State control

5.11 The Sub-Committee recalled that MEPC 65 had approved the BWM circular on *Guidance on ballast water sampling and analysis for trial use in accordance with the BWM Convention and Guidelines (G2)* (BWM.2/Circ.42), and had agreed in principle with the recommendations related to the trial period for reviewing, improving and standardizing the Guidance. MEPC 65 had further instructed the Sub-Committee to keep the above-mentioned guidance under review.

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

- .1 PPR 1/INF.4 (IMarEST) on establishing benchmarks in compliance testing by port State control;
- .2 PPR 1/INF.5 (IMarEST) on contingency measures for ballast water management; and
- .3 PPR 1/INF.7 (Japan) on Japanese voluntary activities related to ballast water sampling and analysis for trial use.

5.13 The Sub-Committee, in thanking the submitters for the information provided and, in particular, congratulating Japan for being proactive in collecting data related to the Guidance, invited Member Governments and international organizations to submit further information and proposals related to ballast water sampling, analysis and contingency measures, to PPR 2, with a view to further developing and improving the relevant guidance documents and guidelines.

Establishment of the Drafting Group on Ballast Water Management

5.14 Having considered the above matters, the Sub-Committee established the Drafting Group on Ballast Water Management and instructed it, taking into account the comments made and decisions taken in plenary, to:

- .1 prepare a draft BWM circular on Guidance on the use of ballast water management systems during stripping operations, using the text in document PPR 1/5/2 (Canada) as the basis; and
- .2 submit a written report to the plenary by Friday, 7 February 2014.

Report of the Drafting Group on Ballast Water Management

5.15 Having considered the report of the Drafting Group (PPR 1/WP.6), the Sub-Committee approved the report in general and took action as outlined hereunder.

(To be prepared by the Secretariat, in consultation with the Chairman, after the session based on the report of the group and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions)

6 PRODUCTION OF A MANUAL ENTITLED "BALLAST WATER MANAGEMENT – HOW TO DO IT"

6.1 The Sub-Committee recalled that MEPC 65 had invited Member States, competent international and/or regional organizations and industry programmes to promote and provide, directly or through IMO, support and technical assistance to secure the necessary funding for the development of a manual on "Ballast Water Management – How to do it", in accordance with conference resolution 3 adopted by the International Conference on Ballast Water Management for Ships (2004).

6.2 In this context, the Sub-Committee noted with appreciation that in addition to the financial support that was previously provided by Transport Canada, the Danish Ministry of Environment had contributed DKK 50,000 for the production of the manual.

6.3 The Sub-Committee further noted that the production of the manual has been included in the Organization's Integrated Technical Cooperation Programme (ITCP) on Capacity Building and Training for 2014, using the funds made available by Canada and Denmark.

6.4 The Sub-Committee also noted with appreciation the offer of IMarEST (PPR 1/6) to support, through access to its network of experts, the Organization in the production of the manual.

6.5 The delegations of France, the Republic of Korea and Singapore informed the Sub-Committee of their willingness to also support the development of the manual.

6.6 The observer from IFSMA, in supporting the development of the manual, requested that the human element be sufficiently considered, in particular with regard to the potential criminalization of ship masters.

6.7 Consequently, the Sub-Committee thanked delegations for their offers of support and requested the Secretariat to act as a focal point and to initiate the development of the manual, in consultation with those delegations wishing to contribute to the work, using funds available under the ITCP, with a view to submitting a first draft of the manual to PPR 2 for consideration.

7 IMPROVED AND NEW TECHNOLOGIES APPROVED FOR BALLAST WATER MANAGEMENT SYSTEMS AND REDUCTION OF ATMOSPHERIC POLLUTION

7.1 The Sub-Committee, having noted that no relevant submissions had been received for consideration at this session, invited Member Governments and international organizations to submit information on improved and new technologies approved for ballast water management systems and reduction of atmospheric pollution to PPR 2, with a view to promoting and encouraging the use of the best available environmental technology not entailing excessive costs in shipping, in line with the goal of sustainable development.

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

8.1 The Sub-Committee recalled that MEPC 65 had agreed to retain the title of this output and had noted that the outcome of the work would be reported to a future session of the Committee for a decision.

8.2 The Sub-Committee further recalled that BLG 17 had established a Correspondence Group on Consideration of the impact on the Arctic of emissions of Black Carbon from international shipping and review of relevant non-mandatory instruments as a consequence of the amended MARPOL Annex VI and NO_x Technical Code and instructed it to report to PPR 1.

8.3 The Sub-Committee further recalled that MEPC 65, having considered document MEPC 65/4/22 (Norway), providing information on emissions of Black Carbon from shipping within the Arctic, as well as information on emissions from shipping north of 50°N, had agreed to forward this document to PPR 1 for consideration.

Report of the correspondence group and other related documents

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

- .1 PPR 1/8 and PPR 1/INF.2 (United States), containing the report of the correspondence group on the progress made in its consideration of a definition for Black Carbon emissions from international shipping, measurement methods for Black Carbon and appropriate control measures to reduce the impact of Black Carbon emissions from international shipping;
- .2 PPR 1/8/1 (Liberia, OCIMF and IPIECA), providing relevant information related to Black Carbon emissions and contributions from international shipping to the deposition of Black Carbon in the Arctic region;
- .3 PPR 1/8/2 and PPR 1/INF.6 (United States), proposing to remove the Filter Smoke Number (FSN) method from further consideration as a candidate measurement method for Black Carbon and suggesting that the primary criterion for selection of the appropriate method is that it can accurately determine both Black Carbon mass and light absorption properties of ship emissions;
- .4 PPR 1/8/3 (EUROMOT), suggesting that the determination of equivalent Black Carbon (eBC) by the simple, robust and wide spread FSN method is adequate to fit the purpose of assessing the impact on the Arctic of emissions of Black Carbon from international shipping;
- .5 PPR 1/8/4 (EUROMOT) commenting on the report of the correspondence group and providing details of the involved method for elemental carbon (EC) determination from particulate matter (PM) filter samples;
- .6 PPR 1/8/5 (Norway), proposing an alternative definition of Black Carbon, together with possible control measures to reduce the impact of Black

Carbon emissions on the Arctic using FSN values, and suggesting the need to distinguish between new and existing ships (engines) when considering an emission reduction policy;

- .7 PPR 1/8/6 (Canada), presenting a multi-year work plan on Arctic air monitoring which will provide a better understanding of the impacts of current and future air pollutant emissions from ships and other sources on the Arctic environment and on human health; and
- .8 MEPC 65/4/22 (Norway) presenting new emission data of Black Carbon from shipping within the Arctic and from shipping north of 50°N.

General comments

8.5 In considering the report of the correspondence group and the documents commenting on it, the following general comments were, inter alia, made:

- .1 a cautious approach should be taken in moving forward with this subject matter, bearing in mind the low impact of international shipping on the total global Black Carbon emissions as indicated in document PPR 1/8/1;
- .2 scientific research and studies have clearly shown the need to reduce the impact of Black Carbon emissions on the Arctic from international shipping and control measures are currently available; and
- .3 more studies and research are needed in order to gain more reliable information for a better understanding of the matter in question.

Definition of Black Carbon

8.6 The Sub-Committee recalled that BLG 17, having noted the large differences of opinions expressed with regard to the definition of Black Carbon, had agreed that more work was needed before an appropriate definition could be finalized and that the focus of that work should be on the development of a technical definition. Consequently, BLG 17 instructed the correspondence group to consider this matter further.

8.7 The Sub-Committee noted that the correspondence group had exchanged views on three possible definitions, as set out in paragraph 5 of document PPR 1/8, but did not reach consensus on a preferred technical definition. However, there was general consensus that the technical definition and measurement methods are directly connected.

8.8 The Sub-Committee also noted an alternative definition of Black Carbon, proposed by Norway, as set out in paragraph 10 of document PPR 1/8/5.

8.9 The Sub-Committee further noted that EUROMOT, in paragraph 4 of document PPR 1/8/3, suggested excluding any methods, and thereby definitions, referring to refractory Black Carbon (rBC).

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

- .1 the three possible definitions resulting from the deliberations in the correspondence group, namely Black Carbon as elemental carbon (EC), Black Carbon as equivalent Black Carbon (eBC), and Black Carbon as refractory Black Carbon (rBC), formed a good basis for further consideration; .
- .2 a definition should be based on the light-absorption capability of particles, i.e. "light absorbing carbonaceous components (LAC)", as proposed in document PPR 1/8/5, which has been used in literature concerning global warming; and
- .3 to define Black Carbon as light absorbing carbonaceous components is inconsistent with the three possible definitions proposed by the correspondence group, and further analysis is required to determine how this compares to eBC or rBC.

8.11 Following consideration, the Sub-Committee referred the three possible definitions as proposed by the correspondence group (PPR 1/8, paragraph 5), together with the alternative definition in paragraph 10 of document PPR 1/8/5, to the Working Group on Prevention of Air Pollution from Ships for further consideration, with a view to finalization.

Measurement methods for Black Carbon

8.12 The Sub-Committee noted that the correspondence group had considered the following measurement methods:

- .1 Laser Incandescence;
- .2 Multi-Angle Absorption Photometry;
- .3 Photo-Acoustic Spectroscopy;
- .4 Filter Smoke Number (FSN);
- .5 Thermal-Optical Reflectance or Transmittance;
- .6 Aethalometer; and
- .7 Opacimeter.

8.13 The Sub-Committee noted that several documents submitted to this session addressed the FSN measurement method, with opposing views expressed as to its suitability as a measurement method. In the ensuing discussion the following views were, inter alia, expressed:

- .1 the FSN method is a relatively simple, robust and inexpensive method that exhibits a high degree of repeatability, suitable for onboard measurements, and can be applied independent of which fuel is used. Furthermore, the FSN method is an ISO standardized method available for use for internal combustion engines and is well known by the engine manufacture industry and marine technology research institutes;
- .2 the FSN method underestimates Black Carbon emissions and is a measurement of opacity that has historically been used in many sectors as a qualitative indicator of efficient combustion. However, no other sectors in the global economy currently define Black Carbon as compounds that cause opacity, nor using opacity measurement as a basis for Black Carbon inventory development or policy recommendations; and

- .3 the use of the FSN method offers an opportunity for a shift in focus from a theoretical instrument capability to real-life performance, consequently, the FSN method should be used until a more suitable and standardized method is found.

8.14 Having considered the action requested by the correspondence group related to measurement methods (PPR 1/8, paragraphs 15.3 to 15.7), together with documents commenting on it, the Sub-Committee:

- .1 agreed that the Aethalometer and Opacimeter methods should not be further considered;
- .2 agreed that the remaining five measurement methods, as listed in paragraph 8.12 should be further considered by the working group;
- .3 noted the correspondence group's recommendation to consider the real-life performance and output required from methods used for measuring Black Carbon emissions from ships, but agreed not to refer this to the working group for consideration; and
- .4 noted the correspondence group's recommendation regarding method development, including discussion on sample treatment and testing protocols, and in particular any areas where those procedures might be similar across instruments, and the consideration of any testing protocol adjustments that would be needed for use with different fuels or under different test conditions; and
- .5 agreed that any decisions with regard to pursuing a Black Carbon measurement campaign to assess the practicability of various test methods should be made by the Committee at a later stage.

Possible control measures

8.15 The Sub-Committee noted that the correspondence group had considered possible control measures to reduce the impact of Black Carbon emissions from international shipping. However, due to the lack of consensus on a definition and measurement method, the group was not able to make progress on this item.

8.16 The Sub-Committee considered a possible emission reduction policy as set out in document PPR 1/8/5, highlighting that the scope of any Black Carbon regulations should be limited to ships operating within the Arctic region and that a distinction between new and existing ships (engines) may be needed.

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

- .1 it was premature to discuss possible control measures before agreeing on a definition and measurement method and more reliable studies and data on the general impacts of Black Carbon in the Arctic are needed to make an informed decision;
- .2 it is not appropriate to limit the control measures only to ships operating in the Arctic Area, nor appropriate to differentiate the control measures on existing and new ships;
- .3 there is a need to keep an inventory of possible control measures and it should be kept open;
- .4 thorough technical reviews of the appropriate control measures to reduce Black Carbon emissions from international shipping have been submitted to the Organization; and
- .5 any regulatory measures should be considered and decided by the Committee.

8.18 Following discussion, the Sub-Committee instructed the working group to investigate possible control measures to reduce the impact of Black Carbon emissions from international shipping, bearing in mind any policy issues concerning regulatory measures should be considered and decided by the Committee.

Establishment of the Working Group on Air Pollution Prevention

8.19 The Sub-Committee established the Working Group on Air Pollution Prevention and instructed it, with regard to this agenda item, taking into account the correspondence group report (PPR 1/8) and the documents submitted to this session, and decisions taken and comments made in plenary, to:

- .1 finalize a definition for Black Carbon emissions from international shipping;
- .2 identify appropriate methods for measuring Black Carbon emissions from international shipping;
- .3 consider possible control measures to reduce the impact of Black Carbon emissions from international shipping, but only after having finalized a definition and identified appropriate measurement methods for Black Carbon; and
- .4 submit a written report to plenary by Friday, 7 February 2014.

Report of the working group

8.20 Having considered the part of the report of the working group dealing with this agenda item (PPR 1/WP.5), the Sub-Committee approved it in general and took action as indicated hereunder.

(To be prepared by the Secretariat, in consultation with the Chairman, after the session based on the report of the group and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions)

9 REVIEW OF RELEVANT NON-MANDATORY INSTRUMENTS AS A CONSEQUENCE OF THE AMENDED MARPOL ANNEX VI AND THE NO_x TECHNICAL CODE

9.1 The Sub-Committee recalled that BLG 17 had re-established the correspondence group and had instructed it to further develop two sets of guidelines, namely:

- .1 guidelines to outline the information to be submitted as part of the required notification from an Administration to the Organization in respect of the approval of an approved method as required under regulation 13.7.1 of MARPOL Annex VI; and
- .2 guidelines as called for under paragraph 2.2.5.6 of the revised NO_x Technical Code 2008 (NO_x-reducing devices).

REPORT OF THE CORRESPONDENCE GROUP

9.2 The Sub-Committee had for its consideration document PPR 1/9 (United States), containing the report of the correspondence group, as well as document PPR 1/INF.3 (United States), providing a collation of comments received during the work of the group.

9.3 In considering the actions requested by the correspondence group, the Sub-Committee took action as described in the following paragraphs.

Guidelines in respect of the information to be submitted by an Administration to the Organization covering the certification of an approved method as required under regulation 13.7.1 of MARPOL Annex VI

9.4 The Sub-Committee noted that the correspondence group had prepared draft guidelines in respect of the information to be submitted by an administration to the Organization covering the certification of an approved method as required under regulation 13.7.1 of MARPOL Annex VI (PPR 1/9, annex 1), as well as draft *Guidelines on the approved method process*, which include an accompanying flow chart (PPR 1/9, annex 2).

9.5 In the ensuing discussion, the Sub-Committee noted the general support for the above-mentioned two sets of draft guidelines. In this connection, the Sub-Committee also noted the concerns expressed by a number of delegations over the perceived inconsistency between the text in square brackets regarding the approval of the Approved Method (PPR 1/9, annex 1, paragraphs 2.2.3 and 2.3.1) and relevant regulations in MARPOL Annex VI, bearing in mind that the ultimate responsibility for the IAPP Certificate lies with the flag State.

9.6 Following discussion, the Sub-Committee referred annexes 1 and 2 of document PPR 1/9 to the Working Group on Prevention of Air Pollution from Ships for further consideration with a view to finalization.

Guidelines as called for under paragraph 2.2.5.6 of the revised NO_x Technical Code 2008 (NO_x-reducing devices)

9.7 The Sub-Committee considered the view of the correspondence group that Guidelines as called for under paragraph 2.2.5.6 of the revised NO_x Technical Code 2008 (NO_x-reducing devices) were not necessary owing to the fact that such NO_x-reducing devices are not under development nor being anticipated, and that consequently paragraph 2.2.5.6 of the revised NO_x Technical Code 2008 could be deleted.

9.8 Following consideration, the Sub-Committee agreed that there is no need to amend the NO_x Technical Code 2008 and that the guidelines, as called for under paragraph 2.2.5.6 of the revised NO_x Technical Code 2008 do not need to be developed at this stage.

2009 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS

9.9 The Sub-Committee recalled that BLG 17, having considered documents BLG 17/11/2, BLG 17/INF.3 (Denmark) and BLG 17/11/5 (INTERFERRY), proposing to reconsider the washwater discharge criteria specified in section 10 of the *2009 Guidelines for exhaust gas cleaning systems* (resolution MEPC.184(59)), had agreed not to amend the 2009 Guidelines as proposed, and instead had invited further information on the following:

- .1 impact on the marine environment of discharging washwater with a low pH value; and
- .2 current availability of exhaust gas cleaning systems that can meet the requirements as set out in the 2009 Guidelines and those that cannot.

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

- .1 PPR 1/9/2 (Japan), proposing an amendment to paragraph 6.2 of the 2009 Guidelines to enable the measurement of CO₂ on a wet basis only under the appropriate conditions; and
- .2 PPR 1/9/3 (Norway), highlighting issues related to the installation and verification of Exhaust Gas Cleaning Systems and pointing out that further discussions and guidance are needed for a consistent application of the 2009 Guidelines.

9.11 In the ensuing discussion, the Sub-Committee noted the general support for the proposal contained in document PPR 1/9/3, while several delegations expressed concerns over the measurement of CO₂ on a wet basis as proposed in document PPR 1/9/2.

9.12 Following discussion, the Sub-Committee referred documents PPR 1/9/2 and PPR 1/9/3 to the Working Group on Prevention of Air Pollution from Ships for further consideration with a view to the development of draft amendments to the guidelines.

GUIDELINES PERTAINING TO EQUIVALENT METHODS SET FORTH IN REGULATION 4 OF MARPOL ANNEX VI AND NOT COVERED BY OTHER GUIDELINES

9.13 The Sub-Committee recalled that BLG 17, having considered the text of the draft Guidelines pertaining to equivalent methods set forth in regulation 4 of MARPOL Annex VI and not covered by other guidelines, together with documents BLG 17/11/3 (United States) and BLG 17/11/4 (CSC) commenting on it, had requested MEPC 65 to provide advice on the following specific issues:

- .1 whether equivalent methods can be applied to a group of ships;
- .2 the role of the flag State and port States when approval of an alternative compliance method is under consideration; and
- .3 whether guidance should be generic or applicable to specific alternative compliance methods only, for example, the *2009 Guidelines for exhaust gas cleaning systems* (resolution MEPC.184(59)).

9.14 In this context, the Sub-Committee noted that MEPC 65 had considered the matter and had agreed that sulphur emission-averaging schemes should not be accepted under regulation 4 of MARPOL Annex VI, however, it did not address those issues on which BLG 17 had sought advice.

9.15 Following consideration, the Sub-Committee requested MEPC 67 to provide advice and clarification on those issues listed in paragraph 9.13, which would facilitate the further development and finalization of the draft guidelines in question.

Draft priority list for developing other draft guidelines and guidance documents under MARPOL Annex VI and the NO_x Technical Code 2008

9.16 The Sub-Committee agreed to a proposal by the Chairman that the working group should also be instructed to develop a new draft priority list for developing other guidelines and guidance documents under MARPOL Annex VI and the NO_x Technical Code 2008.

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

9.17 The Sub-Committee instructed the working group established under agenda item 8 (see paragraph 8 [...], taking into account the decisions taken and comments made in plenary, to:

- .1 finalize draft guidelines in respect of the information to be submitted by an Administration to the Organization covering the certification of an approved method as required under regulation 13.7.1 of MARPOL Annex VI, using annex 1 to document PPR 1/9 as the basis;
- .2 finalize draft *Guidelines on the approved method process*, using annex 2 to document PPR 1/9 as the basis;
- .3 develop draft amendments for the *2009 Guidelines for exhaust gas cleaning system*, taking into account documents PPR 1/9/2 and PPR 1/9/3;
- .4 prepare a new draft priority list for developing other guidelines and guidance documents under MARPOL Annex VI and NO_x Technical Code 2008; and
- .5 submit a written report to plenary by Friday, 7 February 2014.

Report of the working group

9.18 Having considered the part of the report of the working group dealing with the agenda item (PPR 1/WP.5, paragraphs ... to ...), the Sub-Committee approved it in general and took action as indicated hereunder.

[To be prepared by the Secretariat, in consultation with the Chairman, after the session based on the report of the group and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions.]

[10 IMPLEMENTATION OF THE OPRC CONVENTION AND THE OPRC-HNS PROTOCOL AND RELEVANT CONFERENCE RESOLUTIONS

Outcome of MEPC 65 and MSC 92

10.1 In considering the outcome of MEPC 65, MSC 92 and C 110 regarding the approval of the terms of reference, biennial agendas for 2014-2015 and the provisional agendas for the first sessions of the restructured sub-committees, the Sub-Committee noted that matters related to pollution preparedness, response and cooperation for oil and hazardous and noxious substances had been added to its terms of reference.

Report of the sixteenth meeting of the OPRC-HNS Technical Group

10.2 The Sub-Committee noted that the sixteenth meeting of the OPRC-HNS Technical Group was held from 28 to 31 January 2014 under the chairmanship of Mr. Woo-Rack Suh (Republic of Korea), and that the report of the meeting was issued as document PPR 1/WP.7.

(To be prepared by the Secretariat, in consultation with the Chairman, after the session based on the report of the group and the actions requested therein, taking into account the decisions taken by the Sub-Committee during subsequent discussions)]

11 CONSIDERATION OF IACS UNIFIED INTERPRETATIONS

11.1 The Sub-Committee noted that no relevant submissions had been received for consideration at this session.

11.2 In this connection, the Sub-Committee also noted that the Assembly, in adopting the *High-level Action Plan of the Organization and priorities for the 2014-2015 biennium* (resolution A.1061(28)), had modified this output to read "Unified interpretation to provisions of IMO safety, security, and environment related Conventions" and invited Member Governments and international organizations to submit any proposals for unified interpretations relating to IMO environment related conventions to PPR 2.

12 CASUALTY ANALYSIS

12.1 The Sub-Committee noted that no relevant submissions had been received for consideration at this session.

12.2 The Sub-Committee also noted that MSC 92 had agreed to change the procedure for the review of casualty reports by sub-committees as follows:

- .1 the III Sub-Committee will only refer casualty reports directly to other sub-committees for consideration if an identifiable current output addressing the matter in question is on the agenda of such sub-committees;
- .2 in cases where sub-committees have no related outputs on their agendas, casualty reports will only be referred to them after consideration by the Committee and establishment of a relevant dedicated output; and

- .3 as a consequence, the output on "Casualty analysis" will be deleted from the biennial agendas of the HTW, NCSR, PPR, SDC and SSE Sub-Committees, but not the III Sub-Committee.

12.3 In light of the above-mentioned decisions of MSC 92, the Sub-Committee invited MEPC 66 to concur with those decisions and agree to the deletion of the output on "Casualty analysis" from the biennial agenda of the Sub-Committee.

13 BIENNIAL AGENDA AND PROVISIONAL AGENDA FOR PPR 2

13.1 The Sub-Committee recalled that the twenty-eighth regular session of the Assembly had adopted the *Strategic Plan for the Organization* (for the six-year period 2014 to 2019) (resolution A.1060(28)) and the *High-level Action Plan of the Organization and Priorities for the 2014-2015 Biennium* (resolution A.1061(28)).

Biennial status report and proposed provisional agenda for PPR 2

13.2 Taking into account the progress made at the session and the instructions of MEPC 65, the Sub-Committee prepared the biennial status report (PPR 1/WP.2, annex 1) and the proposed provisional agenda for PPR 2 (PPR 1/WP.2, annex 2), as set out in annexes [...] and [...], respectively, for consideration by MEPC 66.

Correspondence groups established at the session

13.3 The Sub-Committee established correspondence groups on the following subjects, due to report to PPR 2:

[to be completed by the Secretariat after the session]

Arrangements for the next session

13.4 The Sub-Committee agreed to establish at its next session working/drafting groups on the following subjects:

[to be completed by the Secretariat after the session]

whereby the Chairman, taking into account the submissions received on the respective subjects, would advise the Sub-Committee well in time before PPR 2 on the final selection of such groups.

Intersessional Meeting

[13.5 The Sub-Committee invited MEPC 66 and MSC 93 to approve the holding of an intersessional meeting of the ESPH Working Group in 2015.]

Date of next session

13.6 The Sub-Committee noted that the second session of the Sub-Committee has been tentatively scheduled to take place from 19 to 23 January 2015.

14 ELECTION OF CHAIRMAN AND VICE-CHAIRMAN FOR 2015

14.1 In accordance with the Rules of Procedure of the Marine Environment Protection Committee, the Sub-Committee unanimously [re-elected Mr. Sveinung Oftedal (Norway) as Chairman and Dr. Flavio Fernandes (Brazil) as Vice-Chairman] [elected Mr. ... (...) as Chairman and Mr. ... (...) as Vice-Chairman], both for 2015.

15 ANY OTHER BUSINESS

Disposal of cooking oil

15.1 The Sub-Committee noted that MEPC 65 had instructed it to consider document MEPC 65/7/5 (Marshall Islands) concerning the appropriateness of disposing of cooking oil via a ship's oil residue (sludge tank) as well as the methods of recording such disposal under this agenda item and advise MEPC 66 accordingly.

15.2 In this connection, the Sub-Committee also had for its consideration document PPR 1/15 (Italy), commenting on the above-mentioned document and expressing the view that, in accordance with MARPOL Annex V, cooking oil should be considered as garbage and should be discharged to a reception facility or be disposed by incineration. Italy further proposed that a Unified Interpretation for MARPOL Annex V be developed, not allowing the transfer of cooking oil to ship's oil residue tank (sludge).

15.3 In the ensuing discussion, most of the delegations that spoke supported the view expressed in document PPR 1/15, while some other delegations supported the proposal in document MEPC 65/7/5 as a pragmatic solution.

15.4 With a view to providing further clarity in the matter and ensuring a consistent approach, the Sub-Committee invited interested Member Governments and international organizations to submit relevant proposals, including text for a draft unified interpretation to MARPOL Annex V, to PPR 2 for consideration.

16 ACTION REQUESTED OF THE COMMITTEES

16.1 The Marine Environment Protection Committee, at its sixty-sixth session, is invited to:

(to be prepared by the Secretariat in consultation with the Chairman after the session)

16.2 The Marine Environment Protection Committee, at its sixty-seventh session, is invited to:

(to be prepared by the Secretariat in consultation with the Chairman after the session)

16.3 The Maritime Safety Committee, at its ninety-third session, is invited to:

(to be prepared by the Secretariat in consultation with the Chairman after the session)

ANNEXES

[to be prepared by the Secretariat after the session]
