



Briefings of IMO Meeting

PPR 3 (15 -19 Feb. 2016)

Ref.: IMO-0003-2016

BRIEFING STATUS

Flash

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Subject: News Flash of PPR 3

The Sub-committee on Pollution Prevention and Response(hereinafter 'PPR') held its 3rd session from 15th to 19th Feb. 2016. This briefings describes its main discussions and outcomes which will result in implications to the industries concerned.

In reviewing this briefings, readers should be assured that the outputs written herein are not legally effective until they are adopted as mandatory instruments by MEPC or MSC.

1. Safety and Pollution Hazards of Chemicals and Preparation of Consequential Amendments to the IBC Code

(1) Evaluation of New Products

- **Relevant Provisions** : MEPC.2/Circulars – Provisional Categorization of Liquid Substances
- **Background** : As chemical manufacturers are continually producing new products which are not yet included in the IBC Code, the new products are being evaluated and classified for the carriage on board chemical tankers by ESPH working group at this session and intersession as routine tasks.
- **Discussion and Outcome** : The Sub-Committee reviewed and concurred the report of ESPH 21th containing results of deliberation for the classification and assignment of carriage requirements for the following 19 new products. For detail classification and assignment of carriage requirements, see MEPC.2/Circ.21.

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- Inclusion or revision in list 1(Pure or Technically Pure Substances) of MEPC.2/Circ.21
 - 1-Dodecene, submitted by the United States (ESPH 21/3/7);
 - Bio-fuel blends of Diesel/Gas oil and Alkanes (C9-C24) linear, branched and cyclic with a flashpoint $\leq 60^{\circ}\text{C}$ ($>25\%$ but $<99\%$ by volume);
 - Bio-fuel blends of Diesel/Gas oil and Alkanes (C9-C24) linear, branched and cyclic with a flashpoint $>60^{\circ}\text{C}$ ($>25\%$ but $<99\%$ by volume);
 - Bio-fuel blends of Naphtha and Alkanes (C4-C12) linear, branched and cyclic ($>25\%$ but $<99\%$ by volume);
 - Bio-fuel blends of Gasoline and Alkanes (C4-C12) linear, branched and cyclic ($>25\%$ but $<99\%$ by volume)
 - Triglycerides, C16-C18 and C18 unsaturated, reclaimed (UCO), submitted by Belgium (ESPH 21/3/14);
 - Urea/Ammonium nitrate solution (review of existing carriage requirements), submitted by Norway (ESPH 21/3/16); and
 - Cyclohexane-1,2 dicarboxylic acid, diisononyl ester, submitted by Germany (ESPH 21/3/18)

- Inclusion in list 3(Trade-Named Mixtures) of MEPC.2/Circ.21
 - 10% Scaletreat 8199C in 6% NaCl, submitted by Norway (ESPH 21/3/1);
 - 30-50% Scaletreat SD 12154 in 3% KCl, submitted by Norway (ESPH 21/3/2);
 - SOLVTREAT 12093, submitted by Norway (ESPH 21/3/3);

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- Crosslinker TB-41, submitted by Norway (ESPH 21/3/4);
- Secure SC2020, submitted by Norway (ESPH 21/3/6);
- AP 13246, submitted by the United States (ESPH 21/3/8/Rev.1);
- Lubrizol 16005, submitted by the United States (ESPH 21/3/9);
- Lubrizol CV2301, submitted by the United States (ESPH 21/3/10);
- Lubrizol CV6503 submitted by the United States (ESPH 21/3/11);
- Lubrizol CV7050, submitted by the United States (ESPH 21/3/12); and
- SD-4127, submitted by Norway (ESPH 21/3/17)

- ◆ **Application** : All chemical tankers having IBC fitness certificate
- ◆ **Effective** : 1st January 2016
- ◆ **Implications**
 - ✓ **Shipowners** : Carriage of the products is allowed on board from the effective date, provided that ship's facilities are appropriated. Shipowners intending loading the products on board are kindly requested to contact KR survey team(survey@krs.co.kr) to get amended CoF.
 - ✓ **Shipbuilders** : Shipbuilder may include the list of the products in their newbuilding contract.
 - ✓ **Manufacturers** : n/a

(2) Review of Safety Criteria Guidelines Used in Chapter 21 of the IBC Code

- **Relevant Provisions** : Chapter 21 of the IBC Code – Criteria for assigning carriage requirements for products subject to the IBC Code

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- **Background** : While criteria assessing products produced on or after 2004 have been based on UN GHP guidelines, products assessed before 2004 were reviewed on the basis of provisions of MARPOL Annex II. As part of PPR's work to address inconsistencies in carriage requirements in relation to GESAMP Hazard Profiles for a number of entries in chapters 17 and 18 of the Code, the Sub-Committee agreed planned way forward to review the carriage requirements and any potential changes, based on the application of the revised draft chapter 21 of the IBC Code.
- **Discussion and Outcome** : The Sub-Committee reviewed a revised draft chapter 21 of the IBC Code prepared by the Organization. The following table shows summary of main changes.

Table and graph – Results of application of revised chapter 21 criteria to products in chapter 17 of the IBC Code

Column	Value	Existing chapter 21	Revised chapter 21	% change
Column d	S/P	382	626 [*]	39%
Column g	Cont	375	521	28%
Column j	O	402	237	-70%
	R	259	229	-13%
	C	119	291	59%
Column k	F	130	80	-63%
	FT	114	143	20%
	T	113	292	61%
	No	423	318	-33%
Column n	Yes	95	192	51%

Reviewing the draft, IPTA, ICS and Intertanko expressed their concern that the most significant change would be in the number of products considered to be toxic (T or FT in column k of chapter 17), with an increase of 81%. Classification as Toxic triggers a number of additional requirements

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under the IBC Code for the carriage of these products. The key issues identified were:

- .1 Bow and stern loading and unloading lines shall not be used for the transfer of cargoes emitting toxic vapours required to comply with 15.12.1
- .2 vapour detection issues: Is extra equipment needed? What to detect for (toxic component)? For low volatility products, is instrumentation available to detect concentrations of vapours that are toxic?
- .3 the classification of toxic products: Is the cut-off too low? Do the criteria need to be reviewed / adjusted in chapter 21?
- .4 what other special requirements in the IBC Code would be triggered and are these still valid?
- .5 where and how should these products be identified? and noted that the proposed revision will result in an 81% increase in products considered to be toxic.

In the meantime, the revision of the chapter 21 is expected to be effective from 1st July 2020.

- ◆ **Application** : All chemical tankers having IBC fitness certificate
- ◆ **Effective** : Not adopted yet(anticipating effectiveness in 2020 at the earliest)
- ◆ **Implications**
 - ✓ **Shipowners** : Unless a ship meets additional requirements in the revision, some cargoes on CoF shall be deleted, as appropriated

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- ✓ **Shipbuilders** : Shipbuilders will have to consider the changes in preparing their contract specifications upon the changes are effective
- ✓ **Manufacturers** : Manufactures for toxic vapor detector are advised to have a keen attention to the progress of this issue.

2. Development of Draft for OSV Chemical code

The agenda is relating to the draft Code applicable to ships which intend to carry limited amounts(up to 1200m³) of hazardous and noxious liquid substances in bulk on offshore support vessels, which is not applicable to ships not carrying chemicals such as supply vessels, fire fighting vessels, anchor handling vessels, heavy lifting vessels, etc.

- **Discussion and Outcome :**

(1) Chapter 2(Survival capability and location of cargo tanks)

With regard to the draft text on chapter 2 of ship survival capability and location of cargo tanks, as revised by SDC 2, the Sub-Committee noted the support expressed by two delegations for the proposed quantity threshold values (i.e. 150 m³, 800 m³ and 1200 m³), concerning damage assumptions and standard damage, respectively.

(2) Chapter 16 (Back-loading)

Sub-Committee at PPR 2 had invited interested Member Governments and international organizations to submit any available information on the composition of contaminated backloads to assist in developing special requirements under chapter 15 of the IBC Code to ESPH 21. Taken into account that no documents had been submitted to ESPH 21 on this matter, The Sub-

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Committee instructed ESPH working group at their 22nd meeting to prepare carriage requirements on back-lading noted that with view to approval at PPR 4.

- ◆ **Application** : offshore support vessels carrying limited amounts(up to 1200m³) of hazardous and noxious liquid substances in bulk
- ◆ **Effective** : Not adopted yet(expecting effectiveness in 2019 at the earliest)
- ◆ **Implications**
 - ✓ **Shipowners** : Applicable vessels shall be certified in accordance with the code.(no applicable vessel on KR register book as of March 2016)
 - ✓ **Shipbuilders** : Any interested shipbuilders are kindly advised of being involved in the development of the draft code as the code shall be considered mandatory instrument applicable to newbuildings.
 - ✓ **Manufacturers** : n/a

3. Ballast Water Management Issues

(1) Representative Sampling of Ballast Water

Information on the method of representative sampling of ballast water using a mixer of grid structure was reviewed and the Sub-Committee decided to consider the information in depth at the next session, given what a mixer, the in-line installation, will cause in a safety aspect . A revised draft of BWM.2/Circ.42-Rev.1 is expected to be submitted at PPR 4.

- ◆ **Application** : All ships applicable to D2 of the BWM Convention
- ◆ **Effective** : Not considered yet (even the Convention is not effective yet)
- ◆ **Implications**

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- ✓ **Shipowners** : N/A at this stage
- ✓ **Shipbuilders** : Shipbuilders need to review the information to develop their design of BWMS.
- ✓ **Manufacturers** : Need to check the proposed fittings would work for their systems.

If any further progress on the issue in the future session or any other IMO body, it will be addressed in due course. For the time being, the issue could be regarded pending until PPR 4.

4. Emission of Black Carbon from International Shipping

- **Relevant Provisions** : MARPOL Annex VI/Reg. 14 – SOx and Particulate Matter
- **Background** : Considering that in climatology black carbon or BC is a climate forcing agent and warms the Earth by absorbing heat in the atmosphere and by reducing albedo, the ability to reflect sunlight, when deposited on snow and ice, the issue has been discussed in the IMO on the impact to the Arctic of emission of BC from international shipping.
Main points of discussion until PPR 2 had been the technical definition of BC and measuring method for emission of BC. After the lengthy discussion on the points, PPR 2 and MEPC 68 had agreed with 'Bond et al' as the technical definition of BC. Notwithstanding determination on the definition, measuring and control methods had been still outstanding items.
- **Discussion and Outcome** : At PPR 3 there was no substantial outcomes on the measuring and control methods. Instead, a measurement and reporting protocol was prepared on the basis of submission made by EUROMOTO and

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German and PPR 4 invited member states and industries to voluntarily provide the Organization the data with the agreed protocol form.

Taking into account the issue pertaining to political/self-interested positions of member states, it could be long-term task until legislation of BC emission has been established.

- ◆ **Application** : unforeseeable
- ◆ **Effective** : unforeseeable
- ◆ **Implications**
 - ✓ **Shipowners** : No implications at this stage. It is, however, recommended to monitor progress of legislation of the issue and consequently develop technologies reducing BC emission.
 - ✓ **Shipbuilders** : Ditto
 - ✓ **Manufacturers** : Ditto

5. Amendment To BDN To Permit The Supply Of Fuel Oil Not In Compliance with MARPOL Annex VI/Reg.14

- **Relevant Provision** : MARPOL Annex VI/Reg. 14.5 *'The sulphur content of fuel oil referred to in paragraph 1 and paragraph 4 of this regulation shall be documented by its supplier as required by regulation 18 of this Annex'*
- **Background** : This issue is to follow up on the MEPC and PPR discussions to amend the last paragraph of appendix V of MARPOL Annex VI (Information to be included in the bunker delivery note (regulation 18.5)). Discussion is to resolve the current impasse by which marine fuel oil which does not meet the sulphur limit values of regulation 14 of MARPOL Annex VI cannot be delivered

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to ships which instead have installed approved equivalent means in accordance with regulation 4 of MARPOL Annex VI..

- **Discussion and Outcome** : The Sub-Committee agreed to the draft 2014 Guidelines outlined in the working group at the session and, in addition, set out and agreed on the draft resolution on 2014 guidelines on the approved method process. (the draft annexed to meeting report PPR 1/WP.6 could be reviewed by accessing IMODOCS homepage <https://webaccounts.imo.org>)
=> **The draft will have been submitted at MEPC 70 for its approval. As going well the amendment will be effective from Nov. 2018.**

When an amendment has been adopted(perhaps May 2017), detail technical information will be released in due course.

- ◆ **Application** : All ships having IAPP certificate
- ◆ **Effective** : will be announced upon decision
- ◆ **Implications** : will be announced in due course upon decision
 - ✓ **Shipowners** : -
 - ✓ **Shipbuilders** : -
 - ✓ **Manufacturers** : -

6. Unified Interpretation

- **Relevant Provisions** : NOx Technical Code 2008 and Res.MEPC.198(62) - 2011 Guidelines addressing additional aspects to the NOx Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with SCR system.

Briefings of IMO Meeting are sequentially released by 2 steps as *Flash - Final*.
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- **Background** : The use of NOx-reducing devices is envisaged in the NOx Technical Code 2008 (NTC 2008), as amended; and selective catalytic reduction (SCR) systems are such a type of NOx-reducing device that may be used to provide compliance with the Tier III NOx limit. The 2011 Guidelines addressing additional aspects to the NOx Technical Code 2008 with regard to particular requirements related to marine diesel engines fitted with selective catalytic reduction (SCR) systems (resolution MEPC.198(62)) address additional aspects to the NTC 2008 with regard to particular provisions related to marine diesel engines fitted with SCR systems.

Resolution MEPC.198(62) includes the option for Scheme B Approval under section 6. This allows for the SCR NOx reduction rate to be calculated by using modelling tools, including testing with SCR chambers not to full scale and using simulated gas. The Scheme B route to compliance is non-prescriptive and merely establishes performance goals. No methodology is provided for carrying out the model tests.

IACS, in consultation with engine manufacturers and other interested competent parties, has developed unified interpretations with a view to facilitating the consistent and global implementation of the provisions of the NTC 2008 and resolution MEPC.198(62).

- **Discussion and Outcome** : The Sub-Committee had for its consideration, document PPR 3/18(IACS), providing for consideration 20 IACS Unified Interpretations (UIs) to facilitate the implementation of the NOX Technical Code 2008 and the 2011 Guidelines in relation to the approval of SCR systems and PPR 3/18/2(US – comments on IACS proposal for UI).
While the Sub-Committee noted a practical and urgent need for clarity on the issues raised in document PPR 3/18(IACS) as Tier III NOX emission standards entered into effect on 1 January 2016, it was able to develop unified

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interpretations of Guidelines due to the procedural impediment in accordance with paragraph 5.11 of the Committees' Guidelines (MSC-MEPC.1/Circ.4/Rev.4).

After the length discussion in working group, for 16 of 20 UIs the Sub-Committee prepared a justification for a new output for approval by MEPC 70 on the revision of the 2011 Guidelines and agreed with the draft UI for NOX Technical Code 2008, while the other 4 UIs were not supported for further consideration, as they were identified in the table below.

PPR 3/18	UI supported for further consideration as part of WP item	UI not supported for further consideration as part of WP item
Annex 1 (MPC 107)		x
Annex 2 (MPC 108)	x	
Annex 3 (MPC 109)	x	
Annex 4 (MPC 110)	x	
Annex 5 (MPC 111)	x	
Annex 6 (MPC 112)	x	
Annex 7 (MPC 113)	x	
Annex 8 (MPC 114)	x	
Annex 9 (MPC 115)	x	
Annex 10 (MPC 116)	x	
Annex 11 (MPC 117)	x	
Annex 12 (MPC 118)	x	
Annex 13 (MPC 119)		x
Annex 14 (MPC 120)	x	
Annex 15 (MPC 121)		x
Annex 16 (MPC 122)	x	
Annex 17 (MPC 123)	x	
Annex 18 (MPC 124)		x
Annex 19 (MPC 125)	NTC 2008	
Annex 20 (MPC 126)	NTC 2008	

Table 1 Categorization of the UI elements that could be developed as part of a new work programme item



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- ◆ **Application** : Approval and Survey of SCR
- ◆ **Effective** : not yet decided, subject to approval/adoption by MEPC
- ◆ **Implications**
 - ✓ **Shipowners** : n/a
 - ✓ **Shipbuilders** : It will affect test procedures & requirements for SCR.
Keen attention should be paid to progress and decision.
 - ✓ **Manufacturers** : It will affect test procedures & requirements for SCR.
Keen attention should be paid to progress and decision.

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