IMO BLG 16

Summary report for clients

Overview

The 16th session of the IMO Sub-Committee on Bulk Liquids and Gases (BLG 16) was held from 30 January to 3 February 2012, at the IMO headquarters in London. This briefing summarises subjects discussed which are relevant to the work of Lloyd’s Register.

Summary

Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments (Agenda item 3)

BLG discussed the outcome of the Working Group on the Evaluation of Safety and Pollution Hazards of Chemicals (ESPH Working Group) and the various issues submitted to this session, which are summarized hereunder. For details, please refer to Annex 1 to this document.

1. Concluded items
   - Amendments to the IBC code
     The draft amendments to the code were agreed for approval and subsequent adoption by MEPC and MSC. The expected entry into force date is 1 July 2014.
   - Matters relating to revised MARPOL Annex V - cargo hold cleaning agents and on deck clearing agents
     The amendments to the MARPOL Annex V adopted at MEPC 62 resulted in the request to BLG 16 to consider deck and cargo hold cleaning agents. BLG 16 developed criteria for self-assessment for consideration by MEPC.
   - Matters relating to SOLAS chapter VI amendments
     The ban of onboard blending was replicated in respect to chemical processes onboard (New SOLAS regulation VI/5-3) and a clarification on what does not constitute blending (possible future revision to SOLAS regulation VI/5-2) were agreed for consideration by MSC 90.

2. Items for further discussions
   - Matters relating to Oil Discharge Monitoring Equipment
   - Matters relating to amendments to SOLAS by FP55 and the resulting changes to the IBC Code

Development of guidelines and other documents for uniform implementation of the 2004 BWM Convention (Agenda item 4)

While the working group established during BLG 16 prepared a text for “Sampling and analysis protocol in accordance with the BWM convention and guidelines (G2)”, the plenary disagreed with the text, owing to conflict with G8 guideline - Guidelines for approval of ballast water management systems. The matter will be further discussed at BLG 17.

In addition, the following items will be further discussed at BLG 17:
• Guidance on ballast water sampling and analysis for compliance with the BWM Convention, containing recommended methods and approaches for analysis and sampling protocol needed to test for compliance with the D-1 and D-2 standards and background information on sampling
• Amendments to BWM.2/Circ.33 on Guidance on scaling of ballast water management systems
• Issues deferred from BLG 15 including a proposal to utilise ballast water exchange in combination with ballast water treatment system.

Development of international measures for minimizing the transfer of invasive aquatic species through bio-fouling of ships (Agenda item 5)

BLG 16 considered the draft guidance for minimizing the transfer of invasive aquatic species as biofouling (hull fouling) on recreational craft under 24m in length. The sub-committee agreed to the draft guidance and further agreed that they should be forwarded to MEPC 64 for dissemination as an MEPC circular. The guidance will be voluntary and encourage recreational craft owners/operators to apply a suitable antifouling hull coating and regularly clean the hull including niche areas such as rudders, inlets and outlets, anchors etc.

With regard to “Preparation of time frame, criteria and process for evaluating the effectiveness of the Guidelines in MEPC.207(62)”, the matter will be further discussed at BLG 17.

Development of international code of safety for ships using gases or other low flashpoint fuels (Agenda item 6)

There was substantial progress on the draft text of the code based on the text prepared by the correspondence group, such as the relation with the IGC Code, the location of fuel tanks, an Emergency Shut Down (ESD) concept, fuel covered by this code, issues related to training and others.

A correspondence group was established to discuss and develop the draft code further.

For details, please refer to Annex 2 to this document.

Development of revised IGC Code (Agenda item 7)

There was substantial progress on the draft text of the code, including various issues on definition used in this code and editorial improvements.

The proposal on protection of the fuel piping systems was agreed with modification, e.g., requiring double barriers including double flange.

83 editorial changes were made to the draft code to provide clarity in the text and consistencies with other international standards, such as those developed by IEC. It also includes improvement of texts from perspectives of clear understandings and readability.

BLG 16 considered that the text is ready for the review by other relevant Sub-Committees. Subsequently, the Secretariat was instructed to forward the draft text to these Sub-Committees.

Review of relevant non-mandatory instruments as a consequence of the amended MARPOL Annex VI and the NOx Technical Code (Agenda item 8)

BLG 16 addressed the following items:

1. Criteria for consideration to develop draft guidelines for replacement engines not required to meet the Tier III limit, as required under regulation 13.2.2 of MARPOL Annex VI

While a number of comments have been made on this issue in the course of the preceding correspondence group’s work, this is to continue into a correspondence group. At this stage there is no firm text in place.
2. 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

Following a question raised at MEPC 62, BLG 16 briefly addressed the issue of developing a universally co-ordinated way of applying “approved methods” done to exiting engines as required by regulation 13.7. of MARPOL Annex VI. The matter will be considered further by the correspondence group.

Development of a code for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk in offshore support vessels (Agenda item 9)

BLG 16 considered how best to proceed with the development of the draft OSV Chemical Code. Although there was a submission from the voluntarily co-ordinated intersessional work, there was no working group available for this agenda item. BLG 16 briefly discussed options for future work arrangements.

It was agreed that the matter will be addressed by a correspondence group which will use the document submitted to this session as a basis for its work.

Consideration of amendment to SOLAS to mandate enclosed space entry and rescue drills (Agenda item 10)

BLG 16 reviewed the draft SOLAS amendments prepared by the DSC and agreed in general with the idea of mandating drills onboard but also noted a need for standardized approach on such drills.

Consideration of IACS unified interpretations (Agenda item 11)

Use of sludge oil during the warming-up process of shipboard incinerators

A Unified interpretation in respect of Regulation 16.9 of MARPOL Annex VI was prepared for approval by MEPC 64. It allows sludge oil to be burned during the warm up period for a continuous feed type incinerator, provided the combustion chamber temperature is above 500 °C, and the outlet gas temperature reaches 850 °C within the time specified by the manufacturer’s operating instructions. In any case, not be more than 5 minutes.

Any other business (Agenda item 15) - Impact on the Arctic of Emissions of Black Carbon from International Shipping

Black carbon is, in general, considered as small particles that have light-absorbing characteristics which contribute to climate change in Arctic region.

BLG 16 addressed the issue of black carbon emitted from International shipping which impacts on the Arctic as tasked by MEPC 62. A brief discussion on a definition of black carbon, as well as the way to proceed in the BLG Sub-Committee took place. There will be further discussion at the next session via intersessional work by the correspondence group established for agenda item 8.

List of concluded item

For details, please refer to Annex 3 to this document.
Annex 1 - Evaluation of safety and pollution hazards of chemicals and preparation of consequential amendments (Agenda item 3)

Discussions in detail

1. Concluded items

Draft amendments to the IBC Code

Primary discussion points and amendments made to the code are as follows:

- In total 43 new cleaning additives were presented and 29 accepted for Annex 10 of MEPC2./Circ.
- MEPC.2/Circ – Provisional classification of liquid substances transported in bulk, and other related matters
- Flag State Administrations were asked to check Annex 8 Tripartite Contact addresses including email addresses and update GISIS in case of changes.
- MEPC2./Circ 18 action to be taken by Flag Authorities/manufacturers for ESPH 18 submit expiring tripartite cargoes, so they can be carried after 17 December 2012 without disruption.
- 2 new products were assessed: a discrepancy with regards to fire-fighting requirements for Hexamethylenediamine (molten) was identified. The new information will be in LIST 1 of the MEPC2/Circ 18 on 17 December 2012, all countries, no expiry. OLOA49819 16/3/3 by SINGAPORE for LIST 3 of the MEPC2./Circ 18 all countries, no expiry.
- Inconsistencies in carriage requirements noted for a number of entries in chapters 17 and 18 of the IBC code including undertaking a review relevant chapter 21.

Advice to clients

The evaluation of chemicals leads to the assignment of the carriage requirements of new and existing substances which are eventually published as amendments to the cargo lists contained in the IBC Code. Changes and additions to the IBC Code cargo lists will impact on owners/managers designers and builders and the list of cargoes chemical tankers are permitted to carry.

In conjunction with the above amendments under discussion for entry into force on 1 July 2014, owners also need to recall requirements imposed by MSC.1/Circ. 1324 and 1325 concerning Minimum Experimental Safe Gap which will take effect 1 January 2013. The same principle introduced by these circulars will be applicable to the amendments under discussion.

Applicability

All chemical tankers from 1 July 2014.

Matters relating to SOLAS chapter VI amendments

- Subject to MSC approval and subsequent adoption a new regulation VI 5-3 SOLAS will be introduced into SOLAS prohibiting chemical processing onboard ships. The provisional text is:

  “Any production process on board of a ship during the sea voyage is prohibited. Production processes refer to any deliberate operation whereby a chemical reaction between a ship’s cargo and any other substance or cargo takes place.”

- BLG 16 noted a need for revising existing SOLAS IV 5-2 for future consideration. It was proposed, as an interim measure, to circulate the following interpretation as an MSC-MEPC.2/Circular:

  “The prohibition of the blending of cargoes, as set out in MSC-MEPC.2/Circ.8, does not apply where cargo is re-circulated within its cargo tank or through an external heat exchanger during the voyage for
the purpose of maintaining cargo homogeneity or temperature control, including when two or more different products have previously been loaded into the same cargo tank within port limits.”

**Advice to clients**
The processing ban may impact offshore and other industries.

**Applicability**
All ships

**Matters relating to revised MARPOL Annex V- cargo hold cleaning agents and on deck clearing agents**

Primary discussion points and changes are:

- Resulting MARPOL Annex V revision MEPC asked the working group to develop pollution assessment criteria for cleaning additives for deck washing and solid bulk cargoes.
- It was considered that a system for self classification should be recommended in order to minimise the workload and cost. The criteria should be; not be a harmful substance in accordance with MARPOL Annex III and no Carcinogenic Mutagenic, or Reprotoxic substances. A statement to this effect should be undersigned by the manufacturer.
- BLG did not conclude how the information should be disseminated, but suggests a MEPC circular and/or a list on GISIS.
- BLG also recommended to include safety criteria due to possible occupational safety issues, but was only asked to give guidance about pollution criteria.

2. **Items for further discussion**

**Matters relating to Oil Discharge Monitoring Equipment (ODME) (Amendment to IMO Resolution MEPC 108(49))**

The resolution MEPC 108(49) was modified to include testing with appropriate bio-fuel blends, and as requested from MEPC 62, references to “oil-like substances” were removed. This will become a new resolution which will be applicable for all Annex I tankers carrying bio-fuel blends with 75% petroleum oil or more. Due to time constraints, this subject will be finalized at the ESPH 18 meeting.

**Advice to clients**
Chemical tanker operators who may wish to carry bio-fuel blend (up to 25% mixture) will need to use ODME meeting a new standard from 1 January 2016. Existing fleet needs to comply with the requirement by 1 January 2016, thus advance planning for retrofitting is encouraged.

**Matters relating to amendments to SOLAS by FP55 and the resulting changes to the IBC Code**

The SOLAS Inerting requirements for chemical tankers less than 20,000 dwt but above 8,000 dwt need implementation into the IBC Code. Deadweight, keel laid and nitrogen requirements need incorporation into the IBC Code. BLG decided that ESPH could report this item directly to FP 56.

Also discussed was that MEPC.1/Circ 761 - 2011 Guidelines for the Carriage of Blends of Petroleum Oil and Bio-Fuels, needs amendment regarding the use of alcohol resistant foams when carrying ethanol/gasoline blends, to effect that Ethanol blends over 5% require alcohol resistant foam.

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Discussions in detail

Location of fuel tanks and fuel storage

Tank location was discussed extensively. One proposal was on a probabilistic approach to assess the risk for tank location including factors like volume, ship type and distance to shell which will give the flexibility other than a fix figure requirements. BLG 16 agreed that the method should be further discussed by a correspondent group because the information supporting the probabilistic approach is not verified.

Probabilistic damage is an expertise of the SLF Sub-Committee and therefore the matter will also be forwarded to the Sub-Committee for their input.

It was also pointed out that the draft new IGC code has some changes on the distance of tank/pipe location to shell and this needs to be noted and harmonized.

It was further agreed that Chapter 7 (fuel storage requirement) of IGF code is to be a stand-alone chapter without referring to IGC code.

Discussion on compressed natural gas (CNG) tanks

There was confusion about what the proposed requirements would entail. There were some who would have wished the requirements to apply to all fuels and others who felt that the specific requirements for CNG were appropriate. Decision on location is that tank storage location is not to be used for any other purpose.

After this there was a decision to stop the discussion on Chapter 7 until a consolidated version is developed.

Ventilation arrangements (Chapter 13)

There were comments about the use of airlocks. This will need to be checked in the correspondence group.

Emergency Shut Down (ESD) concept

BLG 16 agreed, in general, that the ESD would protect machinery space. However, BLG 16 also agreed that the ESD concept should be limited to unattended operation and for gases lighter than air, and it must conform to the goal/functional requirements given in section 6.2.1.

Regarding any limitations on size and power BLG 16 could not reach a consensus. However, the majority of the working group were in favour of not limiting the size and power of engine for ESD protected space.

Fuel covered by this code

Working Group at BLG 16 agreed to concentrate its work on natural gas as fuel. Other low flash point fuels would be specifically addressed by separate sections of the code. Relevant parts of the section for natural gas fuel will be referenced in the other sections together with any additional specific requirements applicable to the various fuels.

Cooperation with other sub-committees

The working group of BLG 16 identified the need for other sub-committees to review and advise on the code sooner rather than later. BLG 16 agreed to request STW sub-committee to review and advise on training requirements for those operating ships to which the Code applies. Where ships are using Natural Gas as a fuel
the training undertaken by those operating LNG ships may be found to be appropriate, but this may be a matter that ship operators need to be aware of before they take delivery of such vessels.

BLG 16 also requested the advice from FP sub-committee to review chapter 2, 3 and 11 of the draft code.

On tankers the requirements are covered by the specific requirements and it will need to be considered whether the non-tanker requirements in SOLAS are appropriate for Gas Fuelled ships. It was proposed that this should be put forward to the DE Sub-Committee.

Advices to clients

Lloyd’s Register Rules for the Classification of Natural Gas Fuelled Ships were approved at the 2011 Technical Committee Meeting and are to be published July 2012. The Rules explain the current Lloyd’s Register’s opinion on the use of natural gas (and low flash point fuel with similar properties, provided any differences are taken into account as a part of the design and their hazards mitigated) as fuel for ships other than LNG carriers. The rules accommodate the majority of the requirements of the annex of resolution MSC.285(86) which forms the basis of the draft IGF Code.

Clients are advised to use the above rules instead of LR Provisional Rules for the Classification of Methane Gas Fuelled Ships (2007). LR is continuously developing these Rules and clients are welcome to comment and participate in this Rule development. LR Rules for the classification of Natural Gas Fuelled Ships exclude statutory requirements related to the use of natural gas as fuel.

Applicability

The Code is intended to be made mandatory by the SOLAS convention for ships burning gas as fuel, with the exception at present of Gas Carriers which are covered by the IGC Code. Depending upon the discussion at BLG 17, the code could also be made applicable to other fuels as well as other ship type, such as High Speed Craft.
## Annex 3 - List of concluded item

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