

LEGAL BRIEFING

Sharing the Club's legal expertise and experience



**Latest update on
the Ballast Water
Management
Convention 2004**

THE AUTHORS

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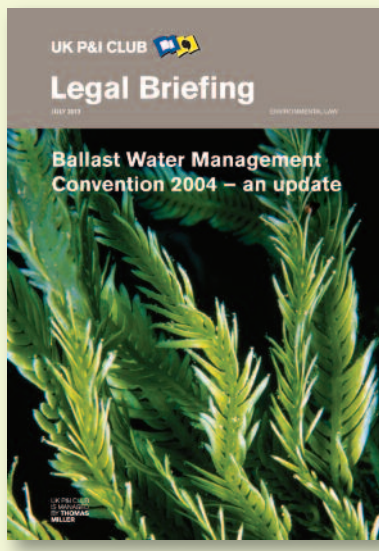
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Jacqueline qualified as a barrister and later as a solicitor. She joined Thomas Miller in 1996 and now works mainly with the Club's

Members in Japan. Jacqueline speaks Malay, French and Hokkien. Jacqueline is a Member of the Club's environmental team which aims to inform Members of the latest changes to legislation and implications for Members.

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Sharing expertise

This briefing is one of a continuing series which aims to share the legal expertise within the Club with our Members.

A significant proportion of the expertise in the Managers' offices around the world consists of lawyers who can advise Members on general P&I related legal, contractual and documentary issues.

These lawyers participate in a virtual team, writing on topical and relevant legal issues under the leadership of our Legal Director, Chao Wu.

If you have any enquiries regarding the issues covered in this briefing, please contact Jacqueline Tan, Jeff Lock (jeff.lock@thomasmiller.com or +44 20 7204 2119) or Chao Wu (chao.wu@thomasmiller.com or +44 20 7204 2157) and we will be pleased to respond to your query.

The team also welcomes suggestions from Members for P&I related legal topics and problems which would benefit from explanation by one of these briefings.

Previous issues

Copies of previous briefings are available to download as pdfs from our website. Visit www.ukpandi.com/publications. ■

Front cover: The ctenophore, also known as the comb jelly, is indigenous to the Atlantic coast of the Americas, but was accidentally introduced to the Black Sea in the 1980s via the ballast water of ships. Later, via the ballast water of oil tankers, it colonised the Caspian Sea. The explosion in its population has had a devastating impact on the local ecosystems.

Stricter ballast water controls are imminent

The International Convention for the Control and Management of Ships Ballast Water and Sediments, 2004 (“the BWMC”), developed and adopted by the IMO, will come into force one year after ratification by at least 30 States comprising 35% of the world’s total gross tonnage.

Ratification status

As of 12th January 2015, 44 States representing 32.86% out of the requisite 35% of the world’s merchant tonnage have ratified the Convention. The outstanding ratification is expected to be obtained shortly and the Convention will likely enter into force in 2016.

Which ships will the Convention apply to?

A ship is defined in the Convention as “a vessel of any type whatsoever operating in the aquatic environment and includes submersibles, floating craft, floating platforms, FSUs and FPSOs”.

The Convention will apply to:

- Ships 400gt and above.
- Ships from Flag States that have ratified, and ships entering jurisdictions of Flag States.

The Convention will NOT apply to:

- Ships not designed or constructed to carry ballast water,
- Ships operating only in waters of one member State (unless the member State determines otherwise),
- Ships of one member State operating only in waters of another member State and the latter authorises an exclusion.
- Ships which only operate in waters of one member State and on the high seas (subject to conditions).
- Any warship, naval or State owned ships.

- Ships with permanent ballast water in sealed tanks not subject to discharge

The compliance schedule

The Convention was drafted with an implementation schedule included under regulation B-3. This schedule anticipated that the requisite number of ratifying countries with the necessary percentage of gross tonnage would have been attained and the Convention entered into force as from 1st January 2014. As the Convention did not come into force by 1st January 2014, the compliance schedule could not be enforced. Therefore, on 25th November 2013, the IMO Assembly formally adopted by Resolution A.1088(28) a revised implementation schedule (see above). This schedule was proposed by

Revised schedule for ships constructed before the EIF of the Convention adopted by Resolution A.1088(28)

Ballast capacity	Constructed before 2009	Constructed in or after 2009 but before 2012	Constructed in or after 2012
Less than 1500m ³	EIF before 2016: by 1st IOPP renewal survey after the anniversary of the delivery of the ship in 2016	By 1st IOPP renewal survey after EIF	
	EIF after 2016: by 1st IOPP renewal survey		
Between 1500m ³ and 5000m ³	EIF before 2014: by 1st IOPP renewal survey after the anniversary of the delivery of the ship in 2014		
	EIF after 2014: by 1st IOPP renewal survey		
Greater than 5000m ³	EIF before 2016: by 1st IOPP renewal survey after the anniversary of the delivery of the ship in 2016		By 1st IOPP renewal survey after EIF
	EIF after 2016: by 1st IOPP renewal survey		

OUTSTANDING CONCERNS

MEPC 65 in May 2013. Under this revised schedule, the date for a ship to comply is determined by her ballast capacity, construction date and the date of her first IOPP renewal survey after Entry Into Force (“EIF”).

The revised implementation schedule includes provisions for EIF before 2014 and before 2016. However, it is now clear that EIF will not be before 2016. The latest position on compliance is therefore as in the table below.

specifies that discharge of the indicator microbes shall not exceed specified concentrations as follows:

- toxicogenic vibrio cholerae (O1 and O139) with less than one colony-forming unit (cfu) per 100 millilitres or less than 1 cfu per 1 gram (wet weight) zooplankton samples
- escherichia coli less than 250 cfu per 100 millilitres
- intestinal enterococci less than 100 cfu per 100 millilitres

So, the technologies are now available but shipowners and Flag States still lack confidence in the effectiveness of type approved equipment. At least two equipment have been withdrawn from the market for compliance failure after receipt of type approval.

The IMO has now tried to address shipowners’ and Flag States’ concerns by adopting at MEPC 67 (13-17 October) as Resolution MEPC.253 (67) measures to be taken to facilitate entry into force of the BWMC. This resolution provides for a comprehensive review of the G8 Guidelines with special focus on the robustness of the type approval process (see more under “MEPC 67” below).

The latest position:

All ships over 400 GT

With keel laying dates before EIF
With keel laying dates after EIF

To comply with the D-2 standard

On her first IOPP renewal survey after EIF
On delivery

Will the IMO delay the coming into force of the Convention?

There remain some unresolved issues and concerns with the Convention. However, the IMO does not intend to delay the Convention because doing so would discourage manufacturers from continuing to invest in advancing the necessary technology in this field. Instead, the IMO’s preferred option is to delay the implementation of sanctions for a trial period of two to three years once the Convention comes into force.

Outstanding concerns and IMO’s responses to the same

(i) The equipment

Under the Convention, a ship is to comply with the standard set by regulation D-2, which specifies that treated and discharged ballast water must have:

- fewer than ten viable organisms greater than or equal to 50 micrometers in minimum dimension per cubic metre
- fewer than ten viable organisms less than 50 micrometers in minimum dimension and greater than or equal to 10 micrometers in minimum dimension per millilitre

In addition, the regulation D-2 standard

Compliance is required throughout the life of the ship.

Previously, there were concerns about a lack of choice from the few Ballast Water Treatment equipment which had received IMO type approval. Over 50 equipment have now received G8 Guidelines type approval, with 36 having been granted IMO Final Approval. Many equipment are under development and at various stages of the approval process. Shipowners’ concerns have now shifted to the question of how to choose the right system for their ships from the confusing array of equipment available.

In order to attain type approval, an equipment is subject to stringent tests, but in practice, it has not been possible to test the equipment for reliability in all water conditions (°C, PSU, salinity, turbidity, etc). The IMO is therefore not in a position to vouch that an equipment that has received type approval will be able to comply with the regulation D-2 standard under all conditions for the duration of the ship’s life.

Guideline G8 of the Convention expressly provides:

“Approval of a system, however, does not ensure that a given system will work on all vessels or in all situations...”

(ii) Sampling and testing

The total volume of ballast water onboard a ship can be in excess of 5,000m³. The organisms and pathogens in the water are not necessarily evenly distributed i.e. there may be patches with higher densities. Concentrations of organisms and pathogens can also vary over time as they replicate and regenerate. This makes the task of obtaining representative samples very difficult. Obtaining a representative sample for testing is crucial for a reliable test result.

Similar concerns exist relating to the testing of samples. Different analytical interpretations will lead to huge uncertainties and unfairness. There is also a current shortage of test facilities.

MEPC 67 has now adopted resolution MEPC.252 (67) Guidelines for PSC on sampling and analysis. These guidelines require clear grounds for violations and detainable deficiencies and are accompanied by recommendations that Port States refrain from imposing criminal sanctions on ships during a trial period of between two and three years following entry into force. The IMO hopes that this trial period will enable all parties to improve upon and to refine the sampling and testing methods.

(iii) Sanctions and rights of recourse

Different factors can contribute to a

YARD CAPACITY



sample failing a PSC analysis. If a sample is found to be non-compliant, it would be difficult for the shipowner to identify the reason for the failure and hence the party against whom he will have a possible recourse. The responsible party could be:

- The manufacturer whose equipment has failed to perform as warranted;
- PSC for having failed to take a representative sample; or
- The laboratory for having negligently performed a test and/or interpreted the test results.

A thorough investigation into the facts would be too costly for the shipowner. It is also likely to delay the ship further.

Shipowners would also like to know:

- What will happen to a ship if her ballast water is found to be non-compliant?
- If she cannot discharge her ballast water, what happens to the cargo she is to load?
- If a repeat test is required, who will be responsible for the cost and the delay?
- If the ship is unduly detained or delayed, can the shipowner really obtain compensation from the port State for loss or damage suffered?

- What is the process for seeking compensation?
- Might seeking compensation lead to the ship being targeted on her next call at that port?
- Will sanctions be limited to fines or also include criminal charges?
- Can shipowners expect sanctions to be enforced in a uniform manner across member States?

The above list is of course not exhaustive. The IMO is hoping that the answers to some of these questions will become clearer during the trial period following entry into force.

(iv) Manufacturers' warranties

Manufacturers warrant that their equipment will work as described, but no guarantees are provided that samples taken from ballast water treated by their equipment will be compliant. Manufacturers' warranties are typically for a one year period even though the equipment are being sold as having lifetimes of between 20 to 25 years.

Both the IMO and the US Regulations include obligations to review standards of compliance and more stringent standards can be expected in the future.

It is unclear to what extent type approved equipment can be modified or upgraded to comply with future higher standards because any modification or attempt to upgrade the equipment may prejudice the equipment's type approved status.

Presently, the cost of upgrading and modifying, and perhaps also the cost of re-obtaining type approval, may all fall on the shipowner.

The IMO has not directly addressed the above issues. However, we are aware that through negotiations, some manufacturers have extended the period of their warranties or agreed to continue providing advice and repairs for some time after the warranties expire.

(v) Yard capacity

It is estimated that some 57,000 ships will need to comply with the BWMC. If, as estimated, a maximum of 40 ships can be retrofitted a day, it will take nearly four years for all the retrofitting to be completed!

Spaces in the major ship yards for fitting BWM systems have all been booked up for the foreseeable future, and there is a serious concern that there will simply be insufficient yard space for fitting all ships in time for them to comply.

Linking a ship's compliance date to her first IOPP renewal survey date was partly intended to address this concern, i.e. by staggering the dates of compliance. However, a real likelihood of serious bottlenecks remains. Ships which fail to comply timely will face serious commercial disadvantages because their trading limits will be severely restricted.

(vi) Shortage of other facilities

There are also concerns about the shortage of shore treatment facilities for ballast water, sediment reception facilities and testing facilities. Efforts are ongoing to establish these.

RECOMMENDATIONS

MEPC 67 (13 to 17 October 2014)

The IMO's Marine Environment Protection Committee had its 67th session from 13 to 17 October, 2014 at the IMO Headquarters in London.

MEPC 67 adopted Resolution MEPC.253(67) on Measures to assist in accelerating the entry into force and implementation of the BWMC.

- The resolution acknowledged that BWM systems need to be sufficiently robust and consistent so that any system approved will meet the standards set out in the BWMC.
- An immediate comprehensive review of the G8 Guidelines will therefore be carried out to address the robustness of type approval of equipment particularly in relation to reliability in various water conditions.
- A correspondence group was established to initiate the review and to report to MEPC 68 in May 2015 with recommendations for revisions of the G8 Guidelines.
- The existing G8 Guidelines will continue to apply until the completion of the review.
- The resolution agrees that “early movers”, in other words, shipowners who have already installed type-approved ballast water management systems prior to the application of the revised Guidelines (G8), should not be penalised and that port States should refrain from applying criminal sanctions or detaining the ship, based on sampling during the trial period.

MEPC 67 also adopted as resolution MEPC.252 (67) Guidelines for port State control inspection for compliance with the BWMC.

- The Port State Guidelines involve a four-stage inspection (see below) and recommend that every effort should be made to avoid any undue delays to the ship:

Stage 1 – Initial inspection

To focus on documentation and visual checks of the overall condition of the

BWM system. This is likely to involve a check of the BWM Certificate and records and a check of the familiarity of the designated officer with the system. If the check triggers any suspicion or doubt, then the PSC may proceed to Stage 2.

Stage 2 – More detailed inspection

A more detailed inspection to check if the BWM system has been operated according to the BWM Plan.

Stage 3 – Sampling and indicative analysis

This will be an indicative analysis to see if the D-2 standard is met. However, the criteria for the indicative analysis method still needs to be developed and this will be submitted to MEPC 68 in May 2015.

Stage 4 – Detailed analysis

A representative sample will be tested to ascertain compliance with the D-2 standards.

MEPC 67 also agreed a plan and terms of reference for a proposed study on implementation of the ballast water performance standard described in regulation D-2. The study will:

- Look at the water quality for discharge, related to specified maximum concentrations of viable organisms.
- Include stakeholder surveys and collection of data on similarities and differences in existing practices relating to type approval, testing of BWM systems and practices relating to analysing the performance of BWM systems after installation on board ships.

The industry is now looking to MEPC 68 in May 2015 for further guidance.

Recommendations to shipowners

Entry into force of the BWMC is now imminent and shipowners must be prepared. Many shipowners have already installed BWM systems and many others are taking steps to do so. There is a risk that those shipowners who have

yet to take such steps, may not be able to fit ships with BWM systems in time to comply with the Convention.

The trading limits of non-compliant ships will be severely restricted and business may be lost. Shipowners should therefore act now. There is a real risk in doing nothing!

1. Consider if the ship can benefit from an Exception, an Exemption or an Alternative Mode of Compliance?

The Convention provides for exceptions, exemptions and alternative modes of compliance to installing a type approved BWM system provided that the same level of protection as fitting such a system onboard can be achieved. If shipowners can take advantage of any of the exceptions, exemptions or alternative modes of compliance, they will be able to save themselves the substantial cost of investing in a BWM system and also avoid incurring the not insubstantial running costs of the system.

Regulation A-3 – Exceptions

Regulation A-3 lists exceptional instances when a ship would not need to comply with the BWMC. This includes regulation A-3(5) below:

“5. Ballast water and sediments are discharged at the same location where the ballast water and sediments originated and there has been no mixing with unmanaged ballast water and sediments from other areas”

Regulation A-4 – Exemptions

Under regulation A-4, a member State(s) in waters under their jurisdiction, may grant exemptions in addition to exemptions contained elsewhere in the Convention but only where they are granted:

- to a ship(s) on a voyage(s) between specified ports or locations;
- to a ship which operates exclusively between specified ports or locations;
- to ships that do not mix ballast water or sediments other than between the specified ports or locations;

EXCEPTIONS

- Any exemption granted must be based on the IMO G7 Guidelines on risk assessment and will be valid for no more than five years. An exemption may be withdrawn at any time for breach of condition or in emergency situations.

An agreement was reached in 2012 to develop a common approach to the granting of exemptions under regulation A-4. The Joint Harmonised Procedure (JHP) was adopted in 2013 to provide clarity and a common standard of environmental protection. The JPHP is currently being reviewed and updated.

Regulation B-3 – Alternative methods of compliance

“6. The requirements of this regulation do not apply to ships that discharge Ballast Water to a reception facility designed taking into account the Guidelines developed by the Organisation for such facilities.

7. Other methods of Ballast Water management may also be accepted as alternatives to the ballast water exchange and performance standards, provided that such methods ensure at least the same level of protection to the environment, human health, property of resources, and are approved in principle by IMO’s Marine Environment protection Committee.”

The alternative methods of compliance referred to above may include:

- Discharge to shore ballast water reception facilities
- Discharge to reception barges, which then discharge to a shore reception facility, or treat the water onboard if the barges are equipped with a BWT system. Barges can also be used to deliver treated water to a ship.
- Use of municipal water – This is not a method approved by the MEPC due to the scarcity of freshwater for drinking and agriculture in many parts of the world. However, it may be an acceptable alternative to compliance for ships with low ballast volume requirements.



2. If not, then take steps to have a BWM system fitted

The experts have estimated that the whole process from selecting a BWM system to installing the system takes from a minimum of six months up to a year. The recommendation therefore is that shipowners should consider setting aside an entire year for this process.

In the majority of cases, the ship will have to be taken out of service for the actual installation of the equipment. If the installation can be planned to coincide with the ship’s scheduled dry-docking, this will save time and costs.

However, a lot of preparatory work for the installation of the equipment can be carried out whilst the ship is still in service. It is recommended that shipowners start by evaluating the available space on board for a BWM system. This can be done by laser scanning the available space. From this first step, the choice of equipment can be narrowed down by the space limitation on board. The choice can then be further narrowed down by cost considerations and other considerations such as the compatibility of the selected system with the ballast system already onboard and the electricity supply onboard, the reliability of the system selected and the shipowner’s confidence in the supplier.

Shipowners should take their time to choose a system that is right for the

particular ship and right for them. Once the choice has been made however, the shipowner can start planning with the chosen manufacturer a schedule for carrying out preparatory work for installing the system. Such preparatory work can be carried out with minimal disruption to the ship’s trade, and can hugely reduce the time period that the ship will subsequently have to spend in drydock for the installation.

Working with a manufacturer early on may also ensure that the ship is allocated a slot in a ship yard for when the system is to be fitted.

Train the crew

BWM systems can be very complex with biological, chemical and physical parts. Once the system has been selected, the crew will need to be trained to operate the equipment and to repair the same in the event of a breakdown.

The crew, or at least the designated officer, will need to be trained to answer potential questions from PSC officers. If the PSC Officers are not satisfied with answers received, they may suspect inadequate training or unfamiliarity with the system, and proceed to a detailed inspection (see “MEPC 67” above).

Apart from the costs of training the crew, the workload and responsibilities on the crew will also increase.

US REGULATIONS

Contractual issues

Under a Time Charter, it will be part of the shipowners' obligations to ensure that the ship complies with applicable laws and regulations, and has the necessary certificates.

Shipowners are advised to review their long term charter parties and, if possible, seek to renegotiate any provisions, as may be necessary, to clarify the parties' respective obligations in respect of the BWMC. New charter parties and new building contracts will need to be negotiated with care.

Bimco have developed a draft BWM Sampling Clause for Time Charters, mainly to deal with the allocation of time and costs relating to the sampling of discharged ballast water. This clause is subject to final approval by the BIMCO Documentary Committee before being published.

Conclusion

It is anticipated that the entry into force criteria will be met shortly as a number of States have indicated that they are making arrangements to deposit their instruments of accession very soon.

The trial period of relaxed compliance after entry into force will hopefully assist in clarifying some of the abovementioned outstanding issues for all stakeholders.

If some issues remain not satisfactorily resolved, even after the trial period has expired, it is very much hoped that the IMO will consider further extending the trial period.

For additional information on this subject, Members are directed to the International Environmental Compliance page on the UK P&I Club's website. A separate update on the US position is available on the website.

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