Legal Briefing
Sharing the Club’s legal expertise and experience

IMO Ballast Water Management Convention 2004
USCG Ballast Water Management Regulations
Sharing expertise

This briefing is one of a continuing series that aims to share the Club’s legal expertise 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 about topical issues under the leadership of our Legal Director, Chao Wu.

If you have any enquiries regarding the issues covered in this briefing, please contact the team via Chao Wu (chao.wu@thomasmiller.com or +44 20 7204 2157) or Jacqueline Tan (jacqueline.tan@thomasmiller.com or +44 20 7204 2118) 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 that would benefit from one of these briefings.
The IMO Ballast Water Management Convention 2004 and the USCG Ballast Water Management Regulations

The lay of the land as 8 September 2019 approaches

INTRODUCTION

The International Convention for the Control and Management of Ships’ Ballast Water and Sediments, adopted by the IMO on 13 February 2004, entered into force on 8 September 2017. As of EIF, ships have had to comply with the Convention’s D-1 ballast water exchange (BWE) requirement but the requirement for ships to have ballast water treatment systems (BWTS) installed as a method of compliance with the D-2 ballast water performance standard was delayed by two years. The first date on which ships will be required to have BWTS fitted will therefore be 8 September 2019.

Across the Atlantic, important developments have also been taking place in relation to the USCG’s BWM regulations which entered into force on 21 June 2012. With over twenty BWTS now issued with USCG type approved certificates, the USCG has hardened its stance on extending Alternate Management System (AMS) certifications and extensions to ships which have reached their implementation deadlines. The Vessel Incidental Discharge Act (VIDA), enacted at the end of last year has however, raised hopes for more harmonisation of the USCG’s BWM regulations with the IMO’s BWMC and with the regulations of other US States.

The IMO Convention took over thirteen years to enter into force, and enforcement of the USCG’s ballast water performance (BWP) standard was continuously postponed from June 2012 due to there being no USCG type approved equipment. The timelines below may therefore serve as helpful recaps of some of the more significant developments on the long and tumultuous journey that these two sets of regulations have taken Members on.

We will also look at some questions Members may have relating to these two regulations as 8 September 2019 approaches, and end with brief guidance on P&I Club cover for claims arising out of breaches of these BWM regulations.

The Mitten Crab 

*Eriocheur sinensis* originates from eastern Asia but has been accidentally introduced to Western Europe, the Baltic Sea and the west coast of North America, causing local extinctions of native species and extensive river bank erosion.
Have the IMO and the USCG reconciled their differences in relation to BWP standards?

While the US have adopted a BWP standard similar to the IMO’s D-2 standard, the two standards are not identical. The IMO uses the most probable number (MPN) method for the testing of UV-based BWTS for its BWP standard. The discharge standard in regulation D-2 of the BWM C refers to “non-viable” organisms meaning organisms which are no longer able to reproduce. The USCG discharge standard on the other hand requires micro-organisms in UV systems to be dead and not simply rendered non-viable.

This difference, as noted, is most relevant for the ultraviolet (UV)-based systems. Such systems are popular because they are relatively easy to use, meaning less training is required, and the use of UV to treat the ballast water creates no harmful by-products.

What is VIDA?

On 4 December 2018, following lengthy lobbying by BWMS manufacturers for an alternative to the current testing protocol used by the USCG, the Vessel Incidental Discharge bill was enacted into law. The Vessel Incidental Discharge Act (VIDA) extended the validity of VGP 2013 beyond 18 December 2018 and made a number of substantial changes. VIDA charged the EPA with the task of establishing vessel discharge standards and the USCG with the task of enforcing the VGP. VGP 2013 would remain in effect until the EPA and the USCG create new regulations addressing vessel discharges. Under VIDA, the EPA has to establish vessel discharge standards no later than two years after enactment, i.e. by 3 December 2020. The EPA is to review the standards every five years and make revisions as necessary. The revised standards cannot be less stringent unless based on new information that would justify less strict standards.
Under VIDA, the Coast Guard is instructed to consider type approval testing methodologies that utilise the most probable number (MPN) method, bringing the USCG’s methodology in line with that of the IMO’s. VIDA amends the USCG regulations by expanding the definition of “living” to ensure that organisms that cannot reproduce (non-viable) are not considered to be living. This amendment means that not being able to reproduce is now regarded to be the same as dead. VIDA has therefore moved the USCG standard closer to the IMO standard.

Furthermore, by making the USCG the sole enforcement body for BWM regulations, this does away with the previous conflicts seen between the EPA policies and the USCG policies.

**Will harmonisation lead to all systems receiving IMO and USCG type approvals?**

The harmonisation of the performance standards for UV-based BWTS means we should be seeing more of such systems gaining US type-approval, increasing the overall choice of systems for shipowners. Some manufacturers who had applications of their systems rejected by the USCG, lodged appeals against those decisions and the appeals are on-going. Shipowners who have already installed IMO approved UV-based systems may therefore find their systems receiving retrospective approval which would mean that they will not need to retrofit their ships with other USCG compliant systems.

There is however another difference between the USCG’s and the IMO’s testing requirements to prove that a BWTS meets the discharge standards. While both the BWM Code and the US type-approval testing are mandatory, the BWM Code allows manufacturers to conduct the testing of their own equipment but the US type-approval testing requires testing independent of the manufacturers.

Manufacturers who have conducted tests on their own systems will therefore still have to pass the presumably more stringent independent tests in the US. It is possible that not all manufacturers of IMO type approved systems will be prepared to submit or re-submit their systems for USCG approval. Until an IMO type approved system has received USCG approval, the system remains...
• recommended that the BWM Code be applied asap when approving BWMS, but not later than 28.10.18
• emphasised that early movers, ships which installed BWMS approved in accordance with the G8 Guidelines, should not be penalised
• agreed that BWMS installed on or after 28.10.20 should be approved taking into account the BWM Code
• agreed that BWMS installed prior to 28.10.20 should be approved taking into account either the G8 Guidelines or preferably the BWM Code

22-26.10.18

MEPC 73
• approved Guidance on System Design Limitations of BWMS and their monitoring, and Guidance for the commissioning testing of BWMS
• adopted amendments to update the Guidelines for BW and development of BWM plans (G4) to address the incorporation of information on contingency measures in BWP plans
• approved a data gathering and analysis plan for an EBP
• agreed to include two new outputs in its agenda: “Review of the BWMC based on data gathered in the EBP”, and “Urgent measures emanating from issues identified during the EBP of the BWMC”, both with a target completion year of 2023

13-17.05.19

MEPC 74
• approved a revision of the circular for data gathering and analysis plan for the EBP associated with the BWMC
• approved amendments to the BWMC concerning commissioning testing of BWMS to demonstrate that its mechanical, physical, chemical and biological processes are working properly
• endorsed the view that commissioning testing should begin as soon as possible.
• agreed updated unified interpretation (UI) of appendix I (Form of the International BWM Certificate). The UI will become applicable on 13.10.19, the same date the BWSM Code becomes effective

Additional Information

IMO FAQ – last updated September 2017

IMO website:

• unapproved, and so there will continue to be BWMS which are approved by the IMO but not by the USCG, at least in the foreseeable future.

Are alternate management systems and USCG time extensions dead?

While the outlook in the wake of VIDA is positive, the benefits will not be felt by shipowners for some time yet.

In the absence or lack of suitable USCG type approved systems, to enable ships to continue trading to the US without being in breach of the USCG final rule, the USCG introduced interim solutions such as the granting to shipowners of AMS status and extensions for compliance. Ships could receive an extension of five years by employing an AMS, normally an IMO-type approved system which had received an AMS approval from the USCG. Shipowners could separately apply for extensions to the ship’s compliance date without installing an AMS.

As there are now over twenty USCG type approved systems available, the USCG has stopped accepting AMS and has severely curtailed its AMS certification, and extensions policies. Shipowners with current AMS certificates and extensions which are about to expire must therefore have their ships fitted with a USCG type-approved BWTS on the expiry of the certificates and extensions. They may be able to buy some time if they can demonstrate that no USCG type-approved system can be fitted. This burden on the shipowner is one that is very, very difficult to shift.

So, while not quite dead yet, AMS and extensions are definitely in their last gasps.

What about more stringent State requirements?

Under the existing VGP, States are permitted to impose additional requirements, including prohibition of certain discharges, in their waters. Twenty five States in the US have imposed such additional requirements over and above federal law requirements. Shipowners have found it difficult to comply with the additional requirements which have on occasion been conflicting, confusing and costly to comply with.

For example, the California State Lands Commission (SLC)’s new rules on BW which came into effect on 1 July, 2017 do not provide for an exemption for ship

Toxic algae washed up on beach, Plage de Postolonnec, Brittany, France
deviation to perform BWE while the federal law does.

Ships arriving from a port or place located outside the Pacific Coast Region (PCR), and carrying ballast water sourced from outside the PCR, must conduct BWE at least 200 NM from any land (including islands) at a depth of at least 2000m. Ships arriving at a port or place from within the PCR and carrying water sourced within the PCR, must conduct BWE at least 50 NM from any land at a depth of at least 200m. Under the federal law, the only requirement for ships conducting BWE is for the BWE to be conducted at least 200NM from shore.

Many ships calling at ports in California have received penalties under the new rules. Perhaps not surprisingly, the biggest reason for the penalties being incurred has been the performance of BWE in the wrong location.

California also has a final standard of “0” living organisms in ballast water discharge. As there is as yet no suggestion that such a standard is possible of being attained, the implementation date for this standard has again been delayed, this time to 01.01.2030. For shipowners, this higher standard is simply causing uncertainty.

Once VIDA is fully implemented however, individual States will no longer be authorised to establish and enforce their own standards for discharges, including ballast water discharges unless they are identical to the federal standards to be promulgated by the EPA. This will remove the burden on ships to comply with more stringent State discharge standards for ballast, graywater, etc. Shipowners will hugely welcome the more harmonious regulations.

Members are nevertheless reminded that the IMO also allows States party to the Convention to implement more stringent regulations. States not party to the Convention are, of course, also free to impose more stringent requirements. Ships calling at ports in these States will have to comply with the more stringent requirements at the ports. States which have enacted requirements more stringent or additional to those under the IMO Convention and the US Federal requirements include Australia, Argentina, Brazil and New Zealand. Members are directed to Lloyd’s Register’s website for a list of National Ballast Water Management Requirements, www.lr.org/en/ballast-water-management.

### USCG BW M REGULATIONS – TIMELINE

**17.06.04**

Linked to the National Invasive Species Act of 1996, the USCG established in 2004 the rules for controlling the discharge of living organisms from ships’ ballast water in US

**23.03.12**

Full text of the USCG Final Rule on Standards for Living Organisms in Ships’ Ballast Water Discharged in U.S. Waters published, to be effective as of 21.06.12. All ships with ballast tanks prohibited from discharging untreated ballast water into US waters. The implementation schedule for the installation of a BWTS under the rule is based on the capacity and the construction date of the ship. (See Diagram no. 3)

**15.06.12**

AMS Determination Policy signed as a bridging strategy. A five year grandfather period is granted after the ship’s compliance date. For AMS approval, the BWMS must have been type approved by a foreign Administration pursuant to the standards set forth in the IMO BWMC

**21.06.12**

Revised USCG regulations on BWM entered into force. The regulations require compliance with the treatment standard at the first scheduled dry-docking after 01.01.16 for sailing ships, and at delivery for newbuildings

**28.03.13**

EPA issued 2013 VGP applicable to discharges incidental to the normal operation of a ship including the discharge of ballast water. VGP requires Best Available Technology (BAT). VGP waters extend up to 3 NM from coastal baseline

**25.09.13**

USCG started granting extensions to compliance dates as no USCG type approved equipment yet available. Ships are not required to be fitted with interim BWMS during the extension period. EPA has no authority to grant similar extensions and did not automatically recognise such extensions

**24.12.13**

EPA issued a joint EPA/USCG letter in which it set out to reassure the industry that it would adopt a unified approach with the USCG to address the industry’s BWM issues, and that it was working with the USCG to ensure the earliest availability of USCG type approved technology

**27.12.13**

EPA issued an Enforcement Response Policy advising its personnel that it would consider a violation of the 2013 VGP ballast water numeric discharge limit a low enforcement priority

**01.01.14**

All captured ships to have a USCG type approved system fitted following first drydocking after 01.01.16. However, no such system yet available

**05.10.15**

2nd US Circuit Court decision in Natural Resources Defence Council vs EPA et al; Decision: EPA appeared to be taking the path of least resistance, not BAT
What has been the effect of de-coupling of IOPP renewal surveys?

When the IMO aligned the date for compliance with Regulation D-2 with the renewal of the ship's International Oil Pollution Prevention (IOPP) certification, many owners arranged to have their IOPP renewal surveys earlier (or as close to 8 September 2017 as possible) to try and delay installing BWMS on their ships for up to five years, up to as late as 2022. However, MEPC 71 in July 2017 delayed the compliance deadline under the Convention by two years, with the deadline for the installation of BWMS starting on 8 September 2019 instead of 8 September 2017. The amended regulation stipulates that ships that completed, or plan to complete, their IOPP renewal surveys between 8 September 2014 and 8 September 2017 must stick to the original schedule. The effect is that owners who had de-coupled found themselves losing two additional years for compliance while those who waited will now have until as late as 8 September 2024 to comply. This unfortunate de-coupling has been cited as one of the reasons many tanker owners who have de-coupled have been scrapping their tankers early. It is noted that some flag states such as Antigua and Barbuda, Curacao, India, Marshall Islands, Panama and Tuvalu and the UK have indicated that they have no objection to allowing re-harmonisation.

While it is understandable that shipowners, for financial reasons, may wish to put off for as long as possible the installation date of their BWTS, shipowners must keep yard capacity at the top of their list of considerations. Shipowners should ensure that they secure yard capacity early for a timely fitting of their BWTS at the ship's first or second IOPP survey after 8 September 2019 as applicable.

Club Cover

Members are reminded that P&I cover for fines involving non-compliance with ballast water requirements will be discretionary (similar to MARPOL violations). In such cases, Members will be required to satisfy the Members’ Committee that all reasonable steps had been taken to avoid the event giving rise to the fine.

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A diver collects invasive lionfish from a local reef at Isla Mujeres, Mexico
**Please see below the UK P&I Club’s previous legal briefings on Ballast Water Management:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>01.07.2013</strong></td>
<td>Outstanding regulatory and compliance issues continue to place shipowners in a dilemma.</td>
</tr>
<tr>
<td><strong>05.01.2016</strong></td>
<td>Outstanding regulatory and compliance issues continue to place shipowners in a dilemma.</td>
</tr>
</tbody>
</table>

- Must install a type-approve BWTS (if compliance date reached) or perform BWE after AMS expiry date

**14.02.18**

USCG issued policy letter: “Guidelines for evaluating potential courses of action when a vessel bound for a port in the US has an inoperable BWMS” – [www.ballast-water-treatment.com/sites/default/files/ressources/uscg-guidelines.pdf](http://www.ballast-water-treatment.com/sites/default/files/ressources/uscg-guidelines.pdf). These guidelines apply to ships using a USCG approved BWMS or a BWMS accepted by the Coast Guard as an AMS. It does not address situations where the inoperable BWMS is the result of an emergency situation caused by weather, casualty, flooding, etc.

**04.12.18**

Vessel Incidental Discharge Act (VIDA) enacted

**18.12.18**

VGP 2013 expired and supplanted by VIDA

**11.03.19**

USCG clarified that it had reconsidered its previous interpretation of ‘next scheduled drydocking’ with respect to BWMS compliance dates. Due to drydock slippage, the USCG determined that ‘first scheduled drydock after (date)’ will not include drydocking for emergency purposes or to install an exhaust gas cleaning system (scrubber) that did not involve a statutory out-of-the-water survey.

**Additional information is available on the USCG’s website**


The USCG’s BWMS Approval Status table, updated on 31 July 2019 lists twenty systems which have received USCG Certificates. Click here. [dco.uscg.mil/Portals/9/MSC/BWMS/BWMS_Approval_Status_31JUL19.pdf](http://dco.uscg.mil/Portals/9/MSC/BWMS/BWMS_Approval_Status_31JUL19.pdf)
1. ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>AMS</td>
<td>Alternate management system</td>
</tr>
<tr>
<td>BWE</td>
<td>Ballast water exchange</td>
</tr>
<tr>
<td>BWMS</td>
<td>Ballast water management system(s)</td>
</tr>
<tr>
<td>BWMT</td>
<td>Ballast water management treatment</td>
</tr>
<tr>
<td>BWP</td>
<td>Ballast water performance</td>
</tr>
<tr>
<td>BWTS</td>
<td>Ballast water treatment system</td>
</tr>
<tr>
<td>EIF</td>
<td>Entry into Force</td>
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<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
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<tr>
<td>IMO</td>
<td>International Maritime Organization</td>
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<tr>
<td>MEPC</td>
<td>IMO Marine Environment Protection Committee</td>
</tr>
<tr>
<td>VIDA</td>
<td>Vessel Incidental Discharge Act</td>
</tr>
<tr>
<td>VGP</td>
<td>Vessel General Permit</td>
</tr>
</tbody>
</table>

2. BWMC 2004 – REVISED SCHEDULE AGREED ON 07.07.2017

<table>
<thead>
<tr>
<th>New vessels</th>
<th>Existing vessels where:</th>
<th>Existing vessels not required to have an IOPP certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keel laid on or after 8 September 2017:</td>
<td>Completed IOPP renewal survey between 8 September 2014 and 7 September 2017:</td>
<td>Install BWM system at whichever occurs first of the following:</td>
</tr>
<tr>
<td>Install BWM system upon delivery</td>
<td>Install BWM system at the first IOPP renewal survey on or after 8 September 2017</td>
<td>First IOPP renewal survey on or after 8 September 2019 OR Second IOPP renewal survey on or after 8 September 2017*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Install BWM system not later than 8 September 2024</td>
</tr>
</tbody>
</table>

*If the first IOPP renewal survey following the date of entry into force of the Convention is completed between 8 September 2017 and prior to 8 September 2019.

3. USCG FINAL RULES IMPLEMENTATION SCHEDULE

<table>
<thead>
<tr>
<th>Vessel's ballast water capacity</th>
<th>Date constructed</th>
<th>Vessel's compliance date</th>
</tr>
</thead>
<tbody>
<tr>
<td>New vessels</td>
<td>All</td>
<td>On or after 1 December 2013</td>
</tr>
<tr>
<td>Existing vessels</td>
<td>Less than 1500 m³</td>
<td>Before 1 December 2013</td>
</tr>
<tr>
<td>Existing vessels</td>
<td>1500-5000 m³</td>
<td>Before 1 December 2013</td>
</tr>
<tr>
<td>Existing vessels</td>
<td>Greater than 5000 m³</td>
<td>Before 1 December 2013</td>
</tr>
</tbody>
</table>

*Drydocking means hauling out of a vessel or placing a vessel in a drydock or slipway for an examination of all accessible parts of the vessel’s underwater body and all through-hull fittings – 46 CFR 71.50-1