

Real Ballast Facts Bulletin

Issue #2, July 2020

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- For any question, ask BEMA External Affairs Committee at external-affairs@bwema.org

Pulse of the Industry

BEMA POLL ASSESSES COVID-19 BUSINESS IMPACTS

Through a Member survey and collection of data from both Members and non-Members, BEMA assessed the business impacts caused by the COVID-19 pandemic. Data from survey respondents shows the BWMS manufacturing community as a whole has successfully been able to meet the demands of the ship owning community in this highly challenging environment.

Over 70% of survey respondents reported that they had suffered no, or minimal, short-term impacts to their ability to deliver systems as scheduled. However over 40% have seen impacts due to the lack of orders for future systems. Ability to meet with customers was cited as a chief concern due to the global nature of the industry and the unpredictable spread of the COVID-19 virus around the world.

Data from survey respondents also indicates that 87% of systems were installed on time and 12% reported installations were delayed or cancelled by the vessel. [Read the full article.](#)

BEMA CHARTER MEMBERS CONTRIBUTE DATA TO EPA

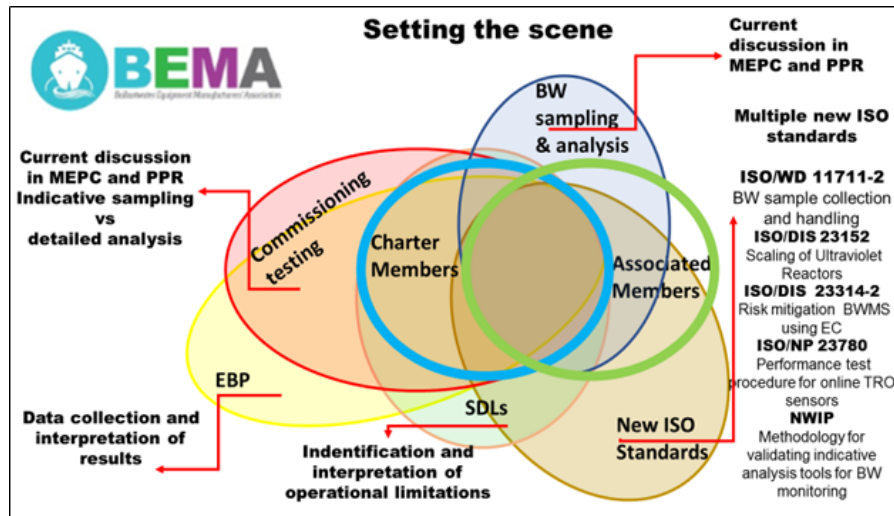
As the only international, non-commercial ballast water industry association that represents a global majority of manufacturers and support providers, BEMA aims to be a trusted resource for reliable technical information about all aspects of BWMS equipment. Aligning with this mission, several BEMA Charter Members voluntarily provided their USCG type approval testing data to the US EPA to support their evaluation of the discharge standard as part of the Vessel Incidental Discharge Act (VIDA) regulatory process. BEMA prepared a confidential report that compiled the data in a standardized format, providing the US EPA access to data that has historically been difficult for the agency to obtain. BEMA recognizes the need for regulatory stakeholders to have access to sufficient biological efficacy data to support development of reasonable and economically achievable ballast water discharge standards and is pleased to have the opportunity to support the US EPA.

BEMA PUBLISHES “TECHNICAL CONSIDERATIONS FOR EXCHANGE OF BWMS COMPONENTS”

The BEMA Technical Committee has published a document titled “[Technical Considerations for Exchange of BWMS Components](#).” The purpose of this document is to raise awareness about the challenges manufacturers face with respect to exchanging components in a Type Approved ballast water management system (BWMS), and to generate discussion about the associated technical considerations and the need to move toward reaching industry agreement on handling the component changes. The target groups for this discussion are the maritime regulatory agencies that approve BWMS, including the International Maritime Organization (IMO), United States Coast Guard (USCG), national administrations and classification societies, along with BWMS manufacturers and their component suppliers

BEMA UPDATES & NEWS

- ★ BEMA is pleased to welcome Michelle Guy, BWMS Sales Manager at Wärtsilä, to the Board of Directors! The expert contributions and industry perspective that Michelle has to offer, as well as the support from Charter Member Wärtsilä industry, are highly appreciated. Welcome, Michelle!
- ★ BEMA is pleased to announce submission of its application to the IMO to achieve Non-Governmental Organization (NGO) Consultative Status. The application will be reviewed at the 124th Council Session, which the IMO will announce the rescheduled date for this meeting in due course.
- ★ The BEMA Technical Committee has begun a new initiative for BEMA Members - a quarterly Technical Forum. These open discussion forums will allow BEMA Members to share experiences, discuss industry "hot topics" and support direct communication of the Members with the Technical Committee. The figure below depicts the many complex and interconnected topics that BEMA Members are discussing.



- ★ The Frequently Asked Questions (FAQ's) section of the BEMA website is up and running! BEMA has introduced a form where anyone can [ask BEMA a question](#), and posted FAQ's on the [BEMA website](#). This is your chance to ask BEMA any question that is related to ballast water - so fire away!

Before submitting your question, please check the FAQ's document on the BEMA website - the *#BallastGeeks* may have already answered it! The FAQ's and will be updated on a quarterly basis based on the questions received.

Regulation Updates & Info

- ★ For all meetings scheduled since mid-March, COVID-19 has greatly affected the IMO's 2020 meeting schedule. Some meetings and correspondence have been done virtually, and the IMO is working to determine priorities and a revised meeting schedule. Stay tuned!
- ★ China has extended the Ballast Water Management (BWM) Convention to the Hong Kong Special Administrative Region. The IMO was notified of this action on May 13, and this brings the coverage of the BWM Convention to more than 90% of shipping worldwide. Effective 13 August 2020, ships flagged with Hong Kong, China will be required to comply with the BWM Convention.

- ★ BEMA Members have reported that a clarification about the IMO Resolutions applicable to BWMS type approval would be helpful for industry stakeholders. On or after 28 October 2020, BWMS type approval must comply with one of the following:
 - IMO Resolution MEPC.279(70) - "2016 Guidelines for Approval of Ballast Water Management Systems (G8)". Important to note is that this resolution contains what is commonly referred to as "revised G8" or "2016 G8" type approval. However, this resolution is still a guideline, not a Code.
 - IMO Resolution MEPC.300(72) - "Code for Approval of Ballast Water Management Systems (BWMS Code)". This resolution contains the same revised G8 requirements as the above resolution, but codified the requirements.

Text changes between the two resolutions were made to convert guideline language (such as "may" or "should") into Code language, such as "must" and "shall". Systems having approval in accordance with either Resolution MEPC.279(70) or Resolution MEPC.300(72) are acceptable for installation on or after 28 October 2020. Additional [useful information has been prepared by DNV GL](#).

BEMA Member Spotlight



Each publication of the Real Ballast Facts Bulletin will shine a spotlight on a featured BEMA Charter or Associate Member. We're proud of our Members and are happy to share their accomplishments, industry developments and latest news. In this issue the spotlight is on [Ecochlor](#)!

"Ecochlor, Inc. was founded almost 20 years ago with the sole purpose of providing a BWM technology to the marine industry. Today, Ecochlor offers a full range of after-sales options to provide shipowners turnkey logistics solutions for system installations.

Ecochlor has moved their Corporate Headquarters into a new and larger location to accommodate their growing business. All of their corporate offices and the International Training Center are now located in one facility in North Haven, Connecticut, USA to streamline efficiency.

Further, Ecochlor is adding environmental protection and crew safety technologies to their portfolio. Last year, they announced a new product offering by signing a Pairing Agreement with NanoVapor, a Vapor Suppression System that is up to 90% faster than conventional air purging to reduce VOC concentrations to safe levels in bunker and cargo tanks containing liquid fuels or petrochemicals. In 2020, Ecochlor signed an agreement with the BIO-UV BWMS manufacturer to offer them additional assistance in global sales opportunities.

Ecochlor anticipates bringing forward additional technologies and cooperative agreements over the next 18 months through in-house developments and by teaming up with innovative maritime environmental solutions providers. The future of our company is to continuously strive for cleaner oceans and safer ship operations for future generations." – *Ecochlor, Inc.*

BEMA Events and Meetings

Clearly, COVID-19 has resulted in many industry events being cancelled, postponed, or moved to a virtual platform. We very much look forward to the opportunity to connect with colleagues in person again soon! Below is a roundup of upcoming events and meetings that BEMA anticipates participating in:

- BWM Tech Florida, 23-24 September 2020 (virtual conference)

- BWM Tech London, 7-9 December 2020
- SMM, 2-5 February 2021

Unfortunately, Posidonia has been cancelled for 2020 and will resume in 2022.

Follow us on social media to get the latest information, news and #RealBallastFacts directly from the #Ballastgeeks themselves. Twitter: [@BEMAAssociation](https://twitter.com/BEMAAssociation) LinkedIn: [Official BEMA LinkedIn Page](#)

Experience Building Phase: Flag State Case Study

BEMA aims to support the IMO's Experience Building Phase (EBP) and serve as a resource for sharing experiences from stakeholders as implementation of global ballast water management regulations continues. In this issue, we are pleased to present the Finnish Flag as a case study.

The Finnish Transport and Communications Agency (Traficom), commissioned a study, *Indicative ballast water analysis testing for port State control purposes*. The aim of the study was to test four indicative analysis devices for port State control monitoring purposes. The study equally aimed to provide useful information on various compliance monitoring related subjects for the experience-building phase of the IMO. The study was conducted for Traficom by the Finnish Environment Institute (SYKE).

A summary of the Report is listed below and the [full document is available here](#).

The International Convention for the Control and Management of Ships Ballast Water and Sediments, 2004 (BWM Convention) of the International Maritime Organization (IMO) entered into force on 8 September 2017, aiming to prevent the spread of aquatic non-indigenous species. All ships must follow the ballast water performance standard (D-2 standard) of the BWM Convention at the latest by 8 September 2024. IMO has determined guidelines for port State control authorities under the BWM Convention that include initial and detailed inspection, as well as ballast water sampling for indicative and detailed analyses of the ships' compliance, if necessary. The Finnish Transport and Communications Agency (Traficom), the port State control authority in Finland may conduct ballast water sampling and indicative analyses during inspections in the future.

The tested indicative methods were Adenosine TriPhosphate (ATP), modified Pulse Amplitude Modulation (PAM) fluorometry, Single Turnover Active Fluorometry (STAF) and Motility and Fluorescence Assay (MFA). The sampling events were conducted in October and November 2018, on two Finnish ships that have ballast water treatment systems installed onboard. The indicative analysis results were compared to detailed laboratory analyses that were conducted for the same samples with fluorescein diacetate (FDA) and epifluorescent microscopy method.

All devices tested were considered portable, reasonably priced, and manageable for port state control officers to use. There was a clear difference in the estimated viable organism concentrations between the treated and untreated water samples using each device, showing their capability to differentiate between untreated and treated waters. The devices had difficulties in referring their results to the compliance limits of the D-2 standard. As these compliance limits are defined as a number of viable organisms per volume of interest, the ATP method does not convert the recorded bulk ATP values into viable organism concentrations. In addition, methods that measure viability only from photosynthetically active phytoplankton cells (PAM and STAF) might be unable to detect compliance status for oligotrophic open sea samples, where these organisms can be rarely present. As the devices are designed to be indicative, it would be more reasonable if the IMO provided indicative compliance limits for the D-2 standard separately. The present D-2 standard compliance limits are inapplicable when compared to the method-specific thresholds of the indicative analysis devices and their accuracy.
