Septembre 5, 2019

Valérie Jennings
Acting Senior Policy Advisor
Legislative, Regulatory and International Affairs
Marine Safety and Security
Transport Canada
Via email: valerie.jennings@tc.gc.ca

Re: Comments on Regulatory Proposal – Revised Ballast Water Regulations

Dear Ms. Jennings,

The Shipping Federation of Canada, incorporated by an Act of Parliament in 1903, is the national voice for shipowners, operators and agents of ocean ships trading at ports across Canada, from the Atlantic to the St. Lawrence and Great Lakes to the West Coast and the Arctic. Our members represent over 200 shipping companies whose vessels make thousands of voyages between Canadian ports and international markets every year, carrying hundreds of millions of tonnes of cargo, ranging from containerized consumer and manufactured goods, to dry bulk commodities such as grain and coal, to liquid bulks such as crude oil and oil products. These ships play an essential role in the Canadian economy by facilitating the movement of Canada's international trade, and they do so safely, securely and efficiently, day in and day out.

We thank you for the opportunity to submit comments on the proposed *Ballast Water Regulations* (the proposed Regulations) which would replace the existing *Ballast Water Control and Management Regulations.*

Overall, we support the approach taken in the proposed Regulations **to the extent** that Canada is implementing the *International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004* (the IMO BW Convention) in Canadian waters and harmonizing with the American regime (where feasible). Alignment with international norms – in this case the IMO BW Convention - is vital given the fact that ships cross multiple borders and multiple jurisdictions all over the world to deliver trade. The alternative would be a patchwork of conflicting national regulations resulting in commercial distortion and administrative confusion which would compromise the efficiency of world trade.

However, **Canada is also considering adding requirements that exceed those of the IMO BW Convention as part of its proposed Regulations**. **As a member of the Government-Industry Group on Ballast Water, we have expressed strong concerns with this approach as it may undermine the IMO BW Convention, subject shipowners to disconnected requirements, and cause confusion in implementation**.

Comment 1: Ballast Water Exchange + Ballast Water Treatment:

Under its regulatory proposal, Canada would require all vessels calling at a Canadian freshwater port to proceed with a combination of mid-ocean ballast water exchange (BWE) and ballast water treatment (BWT), until at least September 8, 2024. [1]

This is a departure from the IMO BW Convention, which contemplates ballast water exchange as an interim requirement only, until all vessels are equipped with ballast water treatment systems (by 2024).

Canada's approach to BWE + BWT would also differ from that of the United States, as it relates to voyages on the West Coast. More specifically, Canada is proposing to extend the requirements for BWE + BWT to all freshwater ports, independently of the origin of the ballast water. The United States, for its part, limited the application of mandatory BWE + BWT on the West Coast to "Pacific near shore vessels" when the BW salinity is less than 18 ppt.[2]

[1] We are aware of only 2 jurisdictions – Canada and the United States – which are proposing or have implemented BWE + BWT as a mandatory requirement (which is different from allowing BWE + BWT as a contingency measure, when treatment systems are overwhelmed by ambient water conditions or in the event of equipment failure).

[2] Under the American *Vessel Incidental Discharge Act* (VIDA), the requirements to conduct BWE + BWT applies to vessels operating between ports in Alaska, California, Hawaii, Oregon, Washington (or between those US Pacific ports and the Pacific coasts of Canada and Mexico) IF the BW salinity is less than 18 ppt.

This means that Canada's regulatory proposal would not only exceed the requirements of the IMO BW Convention (creating a first layer of complexity, with possible confusion in implementation) but it would also add an additional layer of difficulty, to the extent that the Canadian and American requirements are also different on the West Coast.

It is our understanding that Canada is considering BWE + BWT as a policy insurance to increase reliability and biological efficacy of treatment, until the actual performance of ballast water treatment systems for discharge in freshwater can be better assessed. Although this may be a laudable objective, the Canadian regulatory proposal leaves several outstanding issues that must be addressed.

i. Operational and safety considerations:

Transport Canada has not yet provided information on how the requirement for BWE + BWT would be operationalised – i.e., whether vessels would be required to use their ballast water treatment system with every loading event, i.e., at port and mid-ocean (T+E+T) OR whether the ballast water treatment system would be used only at the time of intake of mid-ocean water when conducting BWE (E+T). Although the Canadian regulatory proposal is silent on this question, advice provided by the Department of Fisheries and Oceans concluded that from a biological/scientific perspective, the recommended protocol would be to conduct E+T to strive for the greatest functionality of ballast water treatment systems.[3] Application of the T+E+T protocol would indeed result in a double use of the ballast water treatment system, which will ultimately drive a greater number of ballast uptake and discharge cycles, with a possible increase in safety risks, wear and tear of treatment systems, and greater energy consumption (and a resulting increase in GHG emissions).

On the other hand, a vessel performing only E+T would result in the by-passing of the ballast water treatment system at the load port, which could be considered a violation of the IMO BW Convention. It is our understanding that discussions are ongoing at the IMO to clarify the application of the IMO BW Convention at ports with challenging water quality (i.e., muddy ports) and that such discussions may inform the above questions. In the mean time, Transport Canada must provide comprehensive guidelines to shipowners on how to comply with its proposed mandatory BWE + BWT requirement and how to address "difficult situations" (e.g., muddy waters at load port), especially in a situation where the Canadian Regulations could enter into force before the completion of the IMO discussions.

[3] *The drawback of T+E+T is that challenging port water conditions may cause BWMS to malfunction and require significant maintenance or repair. Given the large differences in our model results when the D-2 standard is applied on 100% versus 50% of voyages,* it is important to strive for the greatest functionality of the BWMS. *As a result, the recommended protocol is to conduct E+T.* Source: Science Advice on the Effectiveness of Ballast Water Exchange Plus Treatment as a Mechanism to Reduce the Introduction and Establishment of Aquatic Invasive Species in Canadian Ports, Canadian Science Advisory Secretariat, Science Advisory Report 2019/003, http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2019/2019_003-eng.pdf

The Institute of Engineering, Science and Technology (IMarEst) also raised some of the legal, safety and operational issues associated with a mandatory requirement to combine BWE + BWT, through a document submitted to the IMO. These include:

- whether BWE + BWT would be a viable option for flow-through BWE or dilution;
- possible safety concerns due to the increased complexity of a combined BWE + BWT operation (stability issues, crew exposure to active substance from BWT, etc.);
- possible operational constraints if the length of the voyage is insufficient to complete the sequence of BWE + BWT within the treatment system design limitations (hold time limitations); and
- increased energy/fuel consumption – which could be as much as four times compared to BWT alone and could impact a vessel's energy efficiency performance and increase GHG emissions. [4]

The IMarEst paper also suggests that some of the new vessels, that are only expecting to perform ballast water treatment under the IMO BW Convention, may not have been designed with adequate structural strength or stability considerations to also perform BWE. We note that the Canadian regulatory impact analysis does not consider this nor any other possible safety and operational limitations that could result from a mandatory BWE + BWT requirement.

Recommendation: Transport Canada must develop comprehensive operational guidelines to address outstanding legal, operational and safety aspects resulting from the imposition of mandatory BWE + BWT in Canadian waters. Guidelines are needed as soon as possible to enable shipowners to adequately prepare for compliance and to support the effective implementation of the proposed Regulations.[5]

i. Effectiveness of BWE + BWT

It is our understanding that the expected benefits of BWE + BWT are still being studied. In fact, the department of Fisheries and Oceans has introduced some caveats on the benefits of this requirement when the ballast source is from marine ports:

> *For all other pathways in Canada, exchange plus treatment has variable effects compared to treatment alone. The most consistent risk reduction of adding exchange to treatment was observed for voyages destined to freshwater ports from freshwater or brackish source ports. Exchange plus treatment is less effective than treatment alone for voyages originating from marine ports and terminating in freshwater ports when 100% of transits meet the D-2 standard. (*Science Advisory Report 2019/003, http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2019/2019_003-eng.pdf

[4] *Practicality and safety of ballast water exchanger plus treatment (BWE+BWT)*, submitted by IMar EST, MEPC 74/INF.22

[5] The proposed TP 13617E, *A guide to Canada's Ballast Water Regulations*', is limited in scope (identification of Alternative Exchange Zone and listing of Canadian freshwater ports) and does not address practicality and safety concerns related to a mandatory combination of BWE + BWT.

Furthermore, and as mentioned above, the US Government has limited the application of mandatory BWE + BWT on the West Coast to Pacific near shore vessels if the ballast water source is low salinity (i.e., less 18 ppt).

Recommendation Although Canada is proposing mandatory BWE + BWT as a temporary measure, pending assessment of the efficacy of ballast water management systems by 2024, there is a need for a clear and comprehensive plan of action detailing how Transport Canada and the science division of Fisheries and Oceans will gather the data necessary to inform Canada's assessment. Canada must dedicate the necessary resources to complete this task as early as possible considering operational and safety aspects associated with BWE + BWT.

ii. Concerns with Restricting the Use of Alternative Exchange Zones in Canadian Waters

Although we welcome Transport Canada's decision to maintain existing alternative exchange zones in Canadian waters when a mid-ocean ballast water exchange cannot be done safely (due to weather, etc.), we note that section 15(1) would now restrict the use of these designated areas to a limited number of vessels, i.e., those using sequential ballast water exchange. We are concerned that other vessels fitted to perform flow-through BWE would not have access to the Canadian designated alternative exchange areas, which could impose an additional strain on these vessels.

How will Transport Canada deal with these situations? Considering that a vessel should not be required to deviate from its intended voyage or delay the voyage in order to manage its ballast water (Regulation B-4(3) of the IMO BW Convention), would Transport Canada allow this vessel to perform only ballast water treatment? Additional information on the implementation of sections 15(1) and (3) is needed.

Comment 2: Extent of the obligations/Liability imposed on masters of foreign flag vessels

Under the Canadian ballast water regulatory proposal, masters of foreign-flag vessels would be responsible for a wide array of obligations, that are in some cases outside the scope of their authority. As an example, under section 4(1) of the proposed Regulations, masters must ensure that the requirements of the Annex to the IMO BW Convention are met, which extend to compliance with vessel survey requirements (periodic renewal surveys, intermediary and annual surveys, etc.). Such functions are usually performed by shore-side management personnel and not by masters, who are assigned to a vessel for a limited period of time (usually 3 to 6 months). We note that section (5) addresses these concerns for masters of Canadian vessels by limiting the scope of obligations imposed on them under Regulation E. The same limitations should apply to masters of foreign-flag vessels. Another example is the requirement for masters to ensure that a vessel ballast water management plan remains up to date (sections 4(2) and 8 of the proposed Regulations). Although the master will be implementing the vessel's ballast water management plan during a voyage, the ongoing updates to a plan will be done by

shore-side personnel and are not within a master's purview (as he/she will be assigned to a vessel for a limited period of time).

Recommendation: The proposed Regulations must be reviewed to ensure that the obligations imposed on masters properly reflect the scope of their authority (including a review of sections 4 and 5).

Comment 3: The need for transparency in the administration of the regulations

Section 5 of the proposed Regulations enables the Minister of Transport Canada to exempt vessels from ballast water management requirements if the conditions set up in Regulations A-4 of the IMO BW Convention are met and such an exemption is in the public interest. The regulatory proposal also contains provisions for "equivalent compliance" (section 6) and "alternative methods of ballast water management" (section 13). Although Transport Canada has stated that it does not anticipate granting significant numbers of exemptions[6], we urge the department to ensure that comprehensive information on the scope of exemptions – including names of vessels and the rationale for the exemption – be made publicly available through a ballast water registry on Transport Canada's website.

Transparency in the administration of the exemption regime, along with the sections relating to equivalent compliance and alternative methods of ballast water management, is key to ensure fairness in the implementation of the regulations and to preserve the integrity of the Canadian approach to managing the risks of ballast water operations in Canadian waters.

Recommendation: Comprehensive information on exemptions/equivalent compliance/alternative method of ballast water management should be made publicly available and a Ballast Water Registry should be set up to host that information.

Comment 4: Cost-benefits analysis – the costs for the international fleet

In the cost-benefit analysis, Transport Canada states that private vessel owners would carry the majority of the costs associated with the proposed Regulations, estimated at $632.39 million. It is important to stress that Transport Canada's cost-benefit analysis only includes the costs of installing ballast water treatment systems on Canadian-flag/domestic vessels; It does not account for the costs of ballast water treatment systems on international vessels operating in Canadian waters (which are the vessels that carry the vast majority of Canada's imports and exports and make up a significant portion of the traffic in Canadian waters).

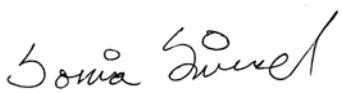
Although this approach is in line with Canada's policy on cost-benefit analysis (i.e., not including costs for international vessels, as treatment systems must already be installed on these vessels under the IMO BW Convention), **it certainly does reflect the full extent of the commitments and investments made by all shipowners that operate in Canadian waters.**

[6] Regulatory Impact Analysis Statement, Canada Gazette, part 1, Volume 153, number 23: Ballast water regulations, June 8, 2019.

International shipowners may invest anywhere from US$0.5 million to US$5 million per ship (depending on the type and the size of the vessels) to fit a ballast water treatment system, excluding operating costs[7] and additional costs that will result from the Canadian national requirements for BWE + BWT. International shipowners are making significant investments to install ballast water treatment system on board their vessels and manage ballast water when operating in Canadian waters.

We thank you for the opportunity to provide comments.

Yours truly,



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7 Including cost of consumables and spare parts, as well as monitoring to ensure that the systems are doing their job in keeping the ship compliant.