



Canadian Ballast Water Policy Considerations

Transport Canada Marine Policy
March 3, 2014





Context

- Canada has ratified the International Maritime Organization (IMO) *International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004* (the "Convention").
- The Convention will enter into force one year after its ratification by nations representing 35 percent of the world's merchant shipping tonnage. Present ratifications amount to 30.38 percent.
- In the expectation that the ratification requirement will be achieved in the near future, Transport Canada (TC) is developing a policy approach to implement the Convention in Canada.
- In advance of the formal regulatory process, TC invited public comment on a discussion paper on integration of Canada's obligations with those of the United States (US), which has its own approach to regulating both domestic and international ships.



Overview of Discussion Paper

- The proposed approach in the discussion paper:
 - applied to Great Lakes ships because of Article 3 of the Convention, which includes vessels over 50 m in length with 8 m³ of ballast water capacity that do not remain solely in “waters under the jurisdiction of Canada,” or in “waters under the jurisdiction of Canada and on the high seas”;
 - adopted the IMO approach to phasing-in a performance standard;
 - allowed the use of ballast water treatment systems, shore-based treatment facilities, permanent retention of ballast water or another method that provides equivalent protection.
 - adopted IMO Convention obligations: approved ballast water management plan; survey, certification and recordkeeping rules; no more favourable treatment for ships of non-Parties.



Overview of Discussion Paper

- The proposed regulatory approach also included certain elements that are more stringent than the Convention, including:
 - Ballast water flushing requirements (for entry to freshwater areas),
 - Exchange plus treatment (for entry to freshwater areas) if a treatment system is used, and
 - Restrictions on loading Great Lakes water through a ballast water treatment system that is not tested in very fresh water.
- It sought to provide a degree of flexibility, notably proposing to use the limited extension provisions in the Convention to align the transition to the performance standard with the US schedule.
- The paper also included a section intended to open a dialogue on the availability of appropriate treatment systems and practical considerations relating to their installation on Great Lakes ships.



Overview of Discussion Paper

- The discussion paper also proposed certain other amendments to existing regulations relating to matters such as:
 - A review of the location of alternate exchange zones
 - Storage of treated or untreated sewage and cargo washings in ballast tanks
 - Availability of sampling ports, where alternative means do not exist to obtain a sample of ballast water
 - Whether to require that sediments be disposed of at a reception facility, or outside of Canada in waters at least 200 nm from shore and at least 2000 m deep.



Responses to public consultation

- TC received about 20 substantive responses to the discussion paper through the public consultation process.
 - The respondents ranged from marine associations, individual shipowners, shippers, scientists, citizen groups, treatment system representatives, and business groups.
- TC took time to analyse each response in detail to identify stakeholder concerns and issues with the proposed approach.
 - The analysis remained aware of current events, and focused on issues of law, science, technology and cost-benefit as well as bi-national and international compatibility.
 - As the discussion paper was issued before the formal regulatory process, the analysis recognized that more information will come through other ongoing, planned or required processes (e.g. National Risk Assessment, regulatory impact analysis).



Themes reflected in responses

- Certain key high-level themes arose from responses, notably:
 - The need for bi-national compatibility and fair application to vessels flying a Canadian, United States or international flag.
 - The level of risk of primary and secondary introductions of aquatic invasive species by coastal vs. international ships.
 - The efficacy of ballast water treatment systems for fresh water, the feasibility of fitting them on Lakers, and their acceptance in the US.
 - The case for ballast water exchange plus treatment, when and where it should be required, and the need to consider a trial period.
 - The need to consider cost-benefit of the proposed approach.
 - The need to determine how the performance aspects of the Convention will be assessed and enforced in a Canadian context.



Themes reflected in responses

- It was also helpful to receive responses of a more specific nature, which touched on above matters and others such as:
 - Operational considerations for specialized vessels, notably tugs, barges and offshore support vessels.
 - Legal analysis on Canadian regulatory flexibility.
 - Scientific analysis of the principles of exchange plus treatment.
 - Technical analysis on the efficacy and feasibility of treatment systems for the Great Lakes.
- As a result of these responses, a number of issues have been identified for further legal, science, technical, cost-benefit and compatibility consideration as the context for ballast water management continues to evolve.



Treatment systems for the Great Lakes

- The Canadian Shipowners Association provided detailed comments on treatment system efficacy for the Great Lakes and on the feasibility of installing these systems on Lakers.
- To better analyze these comments, TC has asked recognized experts to consider the issues and provide formal reviews.
- A workshop to allow discussion between the reviewers and relevant shipowner associations is proposed.

Study 1: Efficacy of Treatment Systems

Goal: To assess efficacy of ballast water treatment systems for the Great Lakes, identify ballast water treatment processes that can be expected to work in this region, identify any outstanding concerns with these processes that relate to conditions and trade patterns on the Great Lakes and to prepare a list of systems with basic, final and/or type approval associated with these processes.

Study 2: Feasibility of Treatment Systems

Goal: To assess the feasibility of installing commercially available ballast water treatment systems onboard the various classes of vessel commonly found on the Great Lakes, assess operational concerns that could interfere with the feasibility of using installed systems, identify appropriate vessel classes for analysis of ballast water treatment system feasibility, and develop a list of vessel constraints based on these classes that can inform the review and future work as well as options for mitigation of these constraints.



Risk posed by ballast water movement

- Some responses questioned the risk of moving species within the interconnected waters of the Great Lakes.
- A response from Fisheries and Oceans Canada Science has made clear that invasive species need help to move through aquatic systems on the scale of the Great Lakes:

“The Great Lakes are not homogenous in their species composition... A number of species that are found in one lake are not necessarily found in other lakes despite apparent physical connection. There are many physical processes that limit the mixing of species from lake to lake, including current and habitat features. For example, fish, one of the most mobile type of organism in the Great Lakes, only have a 54% similarity between two of the Great Lakes. There are also differences between communities within and between Great Lakes. These differences are expected to be even greater for less mobile taxa, like zooplankton. The Great Lakes should not be considered a single homogenous ecosystem.”
- Risk has also been considered by a National Risk Assessment undertaken by Fisheries and Oceans Canada, to be presented at this meeting.



The intent of the Convention

- Some responses advanced the view that the Convention is only intended to address transoceanic ballast water risks.
- In fact, the Convention is general in resolving “to prevent, minimize and ultimately eliminate the risks to the environment, human health, property and resources” by ships.
- Countries ratifying the Convention have recognized the need for globally applicable regulations together with guidelines for their effective implementation and uniform interpretation.
- The Convention requires all international vessels to limit the movement of invasive species by meeting the ballast water performance standard on every discharge.
 - It applies to ships on transoceanic voyages (e.g. Canada-Germany) but also on international voyages that are more regional in nature (e.g. Australia-New Zealand, England-France, Canada-US).



Next steps toward implementation

- TC officials continue to analyze issues raised in public comments according to legal, science, technical, cost-benefit and compatibility considerations toward fair, practicable, and protective ballast water requirements.
- Departmental officials remain available for dialogue throughout this process and will provide updates on the development of the regulatory approach as appropriate, such as at future meetings of the Canadian Marine Advisory Council.
- Further formal opportunities for comment will also be available through the standard regulatory process.
 - This includes a full regulatory impact analysis and publication in the Canada Gazette Part I and the Canada Gazette Part II.



Further information

- For further information please contact:

Dr. Colin Henein
Policy Advisor
Marine Policy (ACFS)
Transport Canada
330 Sparks St.
Ottawa, ON
K1A 0N5

Email: colin.henein@tc.gc.ca
Telephone: (613) 991-9871