



Ballast Water Regulations: New provisions

Spring 2012





Context

- Canada became a contracting Party to the Ballast Water Convention on July 8, 2010
 - 33 countries have ratified
 - The Convention will come into force when the ships registered in these countries represent 35% of the global fleet in terms of tonnage (currently 26.4 %)
- Thus, the Government must fully implement the Convention under the *Ballast Water Control and Management Regulations*
- The Regulations need to be amended to bring in all provisions of the Ballast Water Convention
- Some technical issues also need to be addressed



Fully implementing the Convention Highlights

The Regulations need to require vessels entering or leaving Canada:

- to manage ballast water to prescribed standards by set timelines
 - for most ships, this means using type approved treatment systems
- to have a certificate, record book, and approved management plan
- for Canadian vessels to be surveyed and certified at regular intervals (by class societies)
- to perform exchange and flushing
 - until they are in compliance with the performance standard
 - after compliance with the performance standard, when destined to Canadian fresh and brackish water ports.



Fully implementing the Convention

Other considerations

- Officers and crew must be familiar with the vessel's Ballast Water Management Plan
- For Canadian vessels, TC to approve the Plan
- Survey and certification of Canadian ships to be done by Class societies
- New requirements for where sediments from ballast tanks may be disposed of
- Align revised regulations to come into force with the Convention.



Timelines for performance standards

Build date	Capacity m3	Exchange until	Performance standards from
Before 2009	1500 to 5000	Dec 31, 2014	Jan 1, 2014
Before 2009	<1500 or > 5000	Dec 31, 2015	Jan 1, 2016
2009 to 2010	< 5000	Dec 31, 2011	Jan 1, 2012
After 2010	< 5000		Jan 1, 2010
2010 to 2012	> 5000	Dec 31, 2015	Jan 1, 2016
After 2012	> 5000		Jan 1, 2012



Performance standards

- a) 10 viable organisms per cubic metre, for organisms with a minimum dimension equal to or greater than 50 μm ;
- b) 10 viable organisms per millilitre, for organisms with a minimum dimension equal to or greater than 10 μm but less than 50 μm ;
- c) one colony-forming unit (cfu) of toxicogenic *Vibrio cholerae* (O1 and O139) per 100 mL or one cfu of that microbe per gram (wet weight) of zooplankton samples;
- d) 250 cfu of *Escherichia coli* per 100 mL; and
- e) 100 cfu of intestinal enterococci per 100 mL.



Standard for Exchange

A ballast water exchange must achieve

- a) at least 95% volumetric exchange; and
- b) a ballast water salinity of at least 30 parts per thousand, if the exchange of ballast water is conducted in an area not less than 50 nautical miles from shore.

For flow-through exchange, pumping three times the volume of each ballast tank meets the 95% volumetric exchange requirement



Other technical issues

- Adjustments to boundaries of exchange zones and alternate exchange zones require the advice of DFO Science
 - Laurentian Channel
 - Atlantic Ocean
 - Cape Blanco
 - Pacific Ocean
- As issues evolve, it is likely these boundaries will be adjusted
- Standards for the Arctic need to be considered



Questions?

Paul Topping

Manager, Environmental Protection

Transport Canada Marine Safety

paul.topping@tc.gc.ca

613-991-3168