

Proposed and Existing Ballast Water Treatment Performance Standards for the West Coast

	IMO Regulation D-2 and Transport Canada	S363 – Ballast Water Management Act Section 1101 (f) ⁱ	California Advisory Committee ⁱⁱ	S 770 National Aquatic Invasive Species Act Section (1101 (b) 3	Washington Administrative Code 222-170
Management approach	Exchange moving towards treatment only	Exchange moving towards treatment only	Exchange moving towards treatment only	Exchange moving towards treatment only	Exchange or treatment
Standard:	Proposed	Proposed	Recommended Interim	Proposed	Adopted Interim:
1) Organisms greater than 50 microns in minimum dimension:	<10 viable organisms per cubic meter	< 0.1 living organisms per cubic meter	No detectable living organisms	Promulgate numeric discharge standards to ensure that non-native species will not establish in US waters	Technology to inactivate or remove:
2) Organisms 10-50 microns in minimum dimension:	<10 viable organisms per ml	< 0.1 living organisms per ml	<10 ⁻² living organisms per ml	When no technology exists to accomplish above standard, treat with best performing treatment technology	95% zooplankton
3) Organisms less than 10 microns in minimum dimension:	No standards	No standard	< 10 ³ cfu bacteria/100 ml		99% bacteria & phytoplankton
4) Escherichia coli	< 250 cfu ⁱⁱⁱ /100 ml	<126 cfu/100 ml	<126 cfu/100 ml	<u>For existing vessels:</u> has a concentration of viable biological material that contains 99 percent fewer near-coastal plankton than the concentration of viable biological material of the intake water of the vessel.	
5) Intestinal Enterococci	<100 cfu/100 ml	< 33 cfu/100 ml	<33 cfu/100 ml		
6) Toxicogenic <i>Vibrio cholerae</i> (O1& O139)	<1 cfu/100 ml <1 cfu/gram of wet zooplankton samples	<1 cfu/100 ml <1 cfu/gram of wet weight of zoological samples;	<1 cfu/100 ml < 1 cfu/gram of wet zoological samples <10 ⁴ viruses/100 ml Final standards – no discharge of living organisms	<u>For new vessels:</u> has a concentration of viable biological material that contains 99.9 percent fewer near-coastal plankton than the concentration of viable biological material of the intake water of the vessel	

Proposed implementation schedules:

Proposed by - International Maritime Organization - Senate Bill 363 - California Advisory Committee	Ballast capacity of vessel	Applies to vessels in this class if constructed in or after:	Applies to all other vessels in this class starting in:
	<1500 metric tons	2009	2016
	1500-5000 m tons	2009	2014
	>5000 m tons	2012	2016

Proposed in Senate Bill 770	Implement treatment for vessels built on January 1, 2008 or after
	Implement treatment for all vessels starting January 1, 2011

Current Washington law	All vessels by June 2007
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ⁱ Also included verbatim in S1224 - National Ocean Protection Act

ⁱⁱ Advisory Committee created by the California Lands Commission required by Public Resources code section 71204.9

ⁱⁱⁱ cfu = colony forming units