

U.S. COAST GUARD OFFICE OF OPERATING AND ENVIRONMENTAL STANDARDS

Subject: Proposed Ballast Water Discharge Standard Rulemaking

Issue

The Coast Guard is proposing a two-phase standard for the allowable concentration of living organisms in ships' ballast water discharged in U.S. waters.

Background

This rulemaking is being carried out under the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA), as reauthorized and amended by the National Invasive Species Act of 1996 (NISA). These statutes authorize the Coast Guard to approve alternative ballast water management systems (BWMS) that are found to be at least as effective as mid-ocean ballast water exchange in preventing nonindigenous species introductions.

Proposed Standards and Schedule:

Table 1 compares the Coast Guard's proposed phase-one and phase-two standards. The phase-one standard is based upon the International Maritime Organization (IMO) "Regulation D-2" standard of the Ballast Water Management Convention. The phase-two standard is based on the most stringent proposed U.S. state regulations that are based on quantitative limits. Table 2 lists the implementation schedules. If a practicability review finds that no systems can meet the entire phase-two standard, but a *significant improvement* over phase-one can be practicably achieved, then the Coast Guard will propose intermediate standards and their associated timeline.

Applicability:

- Vessels that operate in U.S. waters and are equipped with ballast tanks, unless they are in innocent passage.
- By statute, the following vessels are exempted from Coast Guard BWM regulations:
 - crude oil tankers engaged in coastwise trade, and
 - vessels of the U.S. Armed Forces as defined in the Federal Water Pollution Control Act (33 U.S.C. 1322(a)) subject to the Uniform National Discharge Standards for Vessels of the Armed Forces (33 U.S.C. 1322(n)). 16 U.S.C. 4711(c)(2)(J), (L).
- By discretion, the proposed rulemaking would **not** apply to vessels that operate exclusively in one Captain of the Port Zone, due to the short nature of these voyages.

Approval of Ballast Water Management Systems (BWMS):

Approvals of BWMS would be based on land-based efficacy tests conducted by certified Independent Laboratories in the U.S. with oversight by the Coast Guard and EPA, as well as shipboard testing to verify the systems' operating capabilities. Biocides used in BWMS may require independent registration by EPA under the Federal Insecticide, Fungicide, and Rodenticide Act. Vessels will also need to meet various water quality criteria established in the EPA Vessel General Permit under the Clean Water Act. A procedure will be developed to evaluate systems which have been type-approved by foreign administrations to ensure they are substantively the same as the U.S. testing procedures.

Future Plans:

The Coast Guard will conduct a 90-day comment period, including a series of public meetings tentatively scheduled for Seattle, WA (28 Sep), New Orleans, LA (30 Sep), Chicago, IL (02 Oct), Washington, DC (08 Oct), Oakland, CA (27 Oct), and New York City (29 Oct). The exact locations and times will be published in the Federal Register. Following the public comment period, the Coast Guard will prepare responses to comments and prepare the final rulemaking for publication.

More Information:

This proposed rulemaking can be found at: <http://www.regulations.gov>. In Search, enter docket number USCG-2001-10486.

Table 1. Comparison Between Phase-One and Phase-Two Discharge Standards

Organism Size	> 50µm*	>10µm & ≤50µm	≤ 10µm	Pathogens and indicators		
				Toxicogenic <i>V. cholerae</i> O1 & O139	<i>E. coli</i>	Intestinal enterococci
Phase One	< 10 / m ³	< 10 / ml	N/A	<1 cfu / 100 ml	<250 cfu / 100 ml	<100 cfu / 100 ml
Phase Two	< 1 per 100 m ³	< 1 per 100 ml	<1,000 bacteria & 10,000 viruses per 100 ml	<1 cfu / 100 ml	<126 cfu / 100 ml	<33 cfu / 100 ml

cfu = colony forming unit

Table 2. Phase One and Phase Two Implementation Schedules

Vessel Category and BW Capacity (cubic meters, m ³)	Vessel Construction Date	Vessel Compliance Date
Phase One Implementation		
New Vessels	ALL	On or after January 1, 2012
Existing Vessels	Less than 1500 m ³	On Delivery
Existing vessels	1500-5000 m ³	First drydocking ¹ after January 1, 2016
Existing vessels	Greater than 5000 m ³	First drydocking after January 1, 2014
Existing vessels	Greater than 5000 m ³	First drydocking after January 1, 2016
Phase Two Implementation		
New Vessels	ALL	On or after January 1, 2016
Existing Vessels	<1500 m ³	On delivery
Existing vessels	1500-5000 m ³	First drydocking after January 1, 2016 or 5 years after installation of BWMS meeting phase-one standard.
Existing vessels	>5000 m ³	As above
Existing vessels	>5000 m ³	As above

* µm: micrometer, a measurement of length, is equal to 1/1,000 of a millimeter or about 4/100,000 of one inch.

¹ Refers to scheduled drydocking which, depending on vessel type and service, could be either a 2.5, 5 or (in very rare cases) 10 year interval.