USCG Ballast Water Discharge Standard Rulemaking

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Joint GL & NE
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Overview

- Road to the Rule
- BWE and BWDS Standard
- Applicability
- Implementation
- Type Approval
- Compliance and Enforcement
- EPA VGP

Rule is Important for…

- Environment – enforceable numeric standard
- Industry – certainty for shipping & BWT vendors
- Coast Guard – statutory requirements; enforcement
- U.S. – aligns with global standard with the International Maritime Organization (IMO) BW Convention, which may enter into force soon
- EPA – complements Vessel General Permit (VGP)

Road to the Rule

- Notice of Proposed Rulemaking - Aug 2009
- Public Comment Period ended – Dec 2009
  - NPRM received over 3,000 comments
  - Top three issues:
    (1) applicability;
    (2) availability of technology; and
    (3) unified Federal standard
- Publish Final Rule – March 2012
  - Docket No. USCG-2001-10486

Drawbacks to Ballast Water Exchange

- Current U.S. BW management required for arrivals from outside EEZ
  - Primarily mid-ocean BW Exchange w/ reporting requirements

- Ballast Water Exchange is less than desirable as a long-term approach to reducing or preventing introductions of ANS via BWD.
  - Structural and operational risks with BWE
    - Design
    - Age
    - Load
    - Sea conditions
  - Effectiveness of BWE in removing ANS can be variable
    - Tank design
    - Type of BWE
    - Salinity & temp differences between BW and ocean water

USCG Ballast Water Discharge Standard

Target organism (size)	Large Organisms (> 50µm)	Small Organisms (>10µ and ≤50 µm)	Very Small Organisms (≤ 10µm)	Bacteria		
				Toxigenic *Vibrio cholerae* (O1 & O139)	*Eschericia coli*	Intestinal enterococci
Discharge Standard	< 10 per m^3	< 10 per ml	N/A	< 1 cfu per 100 ml	< 250 cfu per 100 ml	< 100 cfu per 100 ml

- IMO D-2 Standard; same as EPA VGP 2.0
- Deferral of Phase-Two Standard
- Practicability Review Changes

Independent Studies

- **National Research Council** – Assessed methods to evaluate risk of introductions associated with ballast water discharges
  - IMO provides significant reduction beyond exchange

- **EPA Science Advisory Board -** Evaluate existing/potential shipboard technologies and ability to meet different discharge standards
  - IMO achievable, study does not support Technology-Based Effluent Limit more stringent than IMO
  - Issue of detection/quantification stricter than IMO

Applicability

- Revised Applicability
  - Vessels currently required to conduct Ballast Water Exchange (BWE);
  - Final Rule added ocean-going vessels operating within EEZ, across multiple Captain of the Port Zones and >1,600 GRT
- Operation in one COTP Zone exemption remains
- US and Canadian Lakers currently exempt; CG intends to include in future rulemaking

Implementation

- Follows IMO Convention and proposed EPA VGP schedule
- Date for "new construction" moved to 12/1/2013
- Existing vessels- first drydock after 2014 or 2016 (dependent on BW tank capacity)

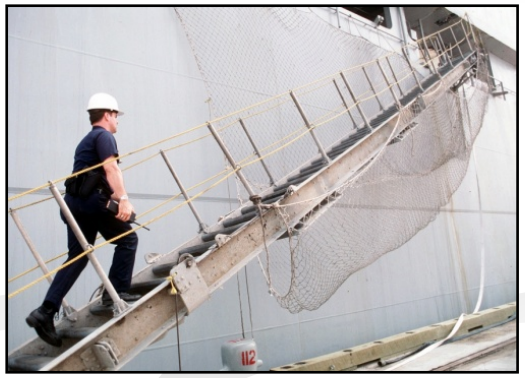
Implementation Schedule for Approved Ballast Water Management Methods			
Vessel's ballast water capacity (in cubic meters)		**Date constructed**	**Vessel's compliance date**
New vessels	All	On or after Dec. 1, 2013	On Delivery
Existing vessels	Less than 1,500 m^3	Before Dec. 1, 2013	First scheduled drydocking after Jan. 1, 2016
	1,500-5,000 m^3	Before Dec. 1, 2013	First scheduled drydocking after Jan. 1, 2014
	Greater than 5,000 m^3	Before Dec. 1, 2013	First scheduled drydocking after Jan. 1, 2016

Type Approval

- Rule establishes process/requirements for designing, testing, installing, and operating BWT equipment.
- IMO approvals and Flag Administration type approvals in accordance with Convention already taking place.
- Private sector entities necessary for USCG type approval process
  - Independent of BWMS vendors/manufacturers
  - Capacity and ability to conduct Environmental Technology Verification (ETV) test protocol with rigorous QA/QC programs.
- Alternate Management Systems (AMS) and acceptance of existing data from foreign type approvals
  - Must meet US data quality requirements – No rubber stamp
  - Ability of foreign facilities to meet all US test req'ts unknown

Compliance and Enforcement

- Assess compliance during regular vessel inspections
  - Port State control for foreign flags
  - Domestic vessel inspection
- Follow existing compliance approach
  - Documents (certifications and records)
  - Crew knowledge, Equipment condition
  - Sample discharge if warranted; sampling ports required
- Sampling and analysis methods and tools in development
- <u>Continue to enforce BWE until rule implemented</u>



EPA VGP

- Coordination with EPA continues
- USCG and EPA signed MOU to cooperate on vessel compliance with VGP
- USCG cannot enforce additional state requirements per Sec. 401 certification
  - Testing protocols and enforcement/detection abilities for higher standard don't exist

Questions?

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