



US COAST GUARD BALLAST WATER DISCHARGE STANDARDS





Overview

- Coast Guard Regulatory Authority
- Previous Ballast Water Regulatory Regime
- New Ballast Water Discharge Standards
- Implementation of the standards:
 - Type Approval and Alternative Management Systems (AMS)
 - Enforcement & Compliance

Authorities for U.S. Coast Guard Regulations



1990 - Nonindigenous Aquatic Nuisance Prevention and Control Act

- Prevent or reduce the introduction and control the spread of NIS via the discharge of ballast water from those vessels entering U.S. waters of Great Lakes after operating outside the exclusive economic zone (EEZ).

1996 - National Invasive Species Act

- Extend Great Lakes regime to the nation.
- BW management practices directed:
 - BWE Mid-ocean; Retention; Alternative BWE areas; USCG-approved, environmentally sound alternatives.



USCG Ballast Water Management Prior Requirements

- **Prior to March 23, 2012 final rule, BW management required for arrivals from outside EEZ:**
 - **Mid-ocean BW Exchange, many vessels claim safety exemption as provided for in current regulation.**
 - **Reporting Requirements for vessels bound for ports or places of the U.S. including number of ballast tanks, volume of BW onboard, origin of BW to be discharged into waters of U.S.**
 - **Ballast Water Management Practices, avoid uptake or discharge in sensitive areas, areas with infestations, clean tanks, rinse anchors & chains, etc.**



Drawbacks to Ballast Water Exchange

- **Ballast Water Exchange is less than desirable as a long-term approach to reducing or preventing introductions of NIS.**
 - **Structural and operational risks with BWE.**
 - Design
 - Age
 - Load
 - Sea conditions
 - Transitory deviation from damage stability limits?
 - **Effectiveness of BWE in removing NIS can be variable.**
 - Tank design
 - Type of BWE
 - Salinity & temp diff's between BW and ocean water



New BW Regs



Requirement	BW Final Rule
Additional Non-Indigenous Species Reduction Practices	Same as in previous rule: Avoid uptake or discharge in sensitive areas, areas with infestations, clean tanks, rinse anchors & chains, etc.
BW Management Plan	Expanded in New Rule: Training and safety procedures, and fouling maintenance & sediment removal procedures.
Extension to Compliance Date	New to Final Rule: Ship owner can request extension of compliance implementation schedule if compliance is not possible.
BW Reporting and Recordkeeping	Same as in previous rule: Ballast Water Reporting Form must be submitted to NBIC for vessel subject to this rule, vessels that have ballast water tanks and operate in U.S. waters.

USCG BW Discharge Standard



Organism size	Amount allowable in discharge
≥ 50 micrometers	Less than 10 organisms per cubic meter
$< 50 - \geq 10$	Less than 10 organisms per milliliter
Indicator microorganisms	
< 1 colony forming unit of toxicogenic <i>Vibrio cholerae</i>	per 100 mL
< 250 cfu of <i>Escherichia coli</i>	Per 100 mL
< 100 cfu intestinal enterococci	Per 100 mL

OPTIONS FOR COMPLYING WITH USCG BWM REQUIREMENT



Meet discharge standard using Coast Guard Approved Ballast Water Management System



Use water from a Public Water Supply



Alternate Management System (5 year use of foreign approved BWMS until system is Coast Guard Approved)

Discharge to Reception Facility

No BW Discharge



BWMS Compliance Dates



Regulation	Requirement						
Jurisdiction	U.S. territorial sea – 12 nautical miles						
Applicability	Sea-going vessels previously required to conduct BWE and coastwise vessels that do not operate outside EEZ but are greater than 1,600 GT and transit between Captain of the Port Zones						
<p>Implementation Schedule</p> <p>Dates are January 1 unless specified (First regularly scheduled drydocking after a vessel's compliance date)</p>	<p>New Vessels (Dec 1, 2013 keel laying): On delivery</p> <p>Existing Vessels (BW capacity in cubic meters):</p> <table border="0"> <tr> <td><1,500:</td> <td>2016</td> </tr> <tr> <td>1,500 - 5,000:</td> <td>2014</td> </tr> <tr> <td>>5,000:</td> <td>2016</td> </tr> </table>	<1,500:	2016	1,500 - 5,000:	2014	>5,000:	2016
<1,500:	2016						
1,500 - 5,000:	2014						
>5,000:	2016						
Great Lakes	Applies to vessels that depart the Great Lakes, transit beyond the EEZ, return and pass upstream of Snell Lock, aka "Salties."						



USCG Type Approval of BWMS

- Long-established USCG program for type approval of ships' equipment
 - All testing by independent laboratories (ILs)
 - ILs vetted by USCG
- Incorporation of EPA Environmental Technology Verification (ETV) Program land-based test protocols
 - consistent with IMO BW Management Convention



Additional Provisions: AMS

- Alternate Management Systems (AMS)
 - Bridging strategy to address fact that foreign type-approved systems are being installed prior to FR compliance dates
 - Must have been approved by foreign administration in accordance with IMO BW Convention
 - 5-year grandfather period after vessel compliance date

Approved AMS may be found on Homeport:



- ◎ [Missions](#) > [Environmental](#) > [Ballast Water Management Program](#) > [Alternate Management Systems \(AMS\)](#) > Alternate Management Systems for Ballast Water Treatment
- ◎ [CGMIX](#)

Additional Provisions and Extensions



- ⦿ Vessels may choose other methods to meet the ballast water discharge standard besides installing a BWMS
- ⦿ Extensions can be granted for no longer than the minimum time needed for the vessel to comply with the ballast water discharge standard
 - A vessel owner/operator can request an extension to the vessel's implementation schedule for approved Ballast Water Management methods
 - If CG type approved BWMS are not available, CG can grant an extension. See OES Policy Letter 13-01.



Compliance and Enforcement

- ⦿ Assess compliance during regular vessel inspections
 - Port State control for foreign flags
- ⦿ Follow existing compliance approach
 - Documents (certifications and records)
 - Crew knowledge
 - Equipment condition
 - Sample discharge if warranted
- ⦿ Sampling and analysis methods and tools in development



USCG VGP Enforcement

- The USCG will enforce the EPA's VGP where it concurs with 33 CFR 151.
- All vessels over 300GT or that have the capacity to discharge 8 cubic meters (2113 gallons) of ballast water must submit a Notice of Intent (NOI) to the EPA for the 2013 VGP
- A new policy letter regarding CG VGP enforcement is in the works.

Thank You

