BALLAST WATER MANAGEMENT IN THE UNITED STATES

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OVERVIEW

- United States Coast Guard (USCG) “Final Rule” requirements
- US Environmental Protection Agency (EPA) Vessel General Permit revision proposal
- US individual state requirements and proposals
- Legislation proposed in the US Congress
- Impact
- What’s next
- Recommendations
- Information Links






USCG AND EPA BALLAST WATER MANAGEMENT (BWM) OVERVIEW

- US is not a party to the IMO BWM Convention 2004.
- So, while Convention ratification status has no direct impact, USCG and EPA have adopted some aspects of the Convention.
- USCG Authority: Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (NANPCA) as amended by the National Invasive Species Act of 1996 (NISA)
- EPA Authority: Clean Water Act as amended by the Federal Water Pollution Control Act.
- These separate statutory authorities require separate regulatory program by law.


USCG AND EPA BWM OVERVIEW (continued)

- Both USCG and EPA have adopted BWM Convention D-2 standard but employ a more rigorous Environmental Technology Verification (ETV) testing protocol to determine if treatment systems meet D-2.
- Some treatment systems type approved under the Convention G-8 test protocol by other flag administrations may not meet ETV.
- USCG final and EPA proposed basic compliance dates differ and are based upon drydocking date, with different definitions, versus the BWM Convention survey date.
- USCG FAQs are available as well as EPA Vessel General Permit (VGP) Fact Sheet, to further explain requirements.

USCG FINAL RULE

- Entered into force 21 June 2012 and applies to discharges of ballast water into US waters up to 12 nm from the baseline.
- Updated existing BWM requirements, including:
  - Addition of ballast water treatment requirement option employing the D-2 standard as noted previously;
  - More detailed requirements for a BWM ship specific plan including bio-fouling maintenance;
  - Acceptance of Alternate Management Systems (AMS) type approved by other governments under the BWM Convention;
  - Delay in compliance date for new vessels.
- USCG will conduct a review for practicality of a more stringent standard and publish results by 1 January 2016.
- Requires compliance with the EPA VGP.


USCG FINAL RULE BWM OPTIONS

- Install and operate a Ballast Water Management System (BWMS) approved by the USCG under 46 CFR 162.
- Use water only from a US public water system.
- Perform complete ballast water exchange in an area more than 200 nm from any shore unless the vessel is required to employ an approved BWMS per the published USCG schedule.
- An AMS installed before scheduled compliance date may be used for up to five years beyond the USCG compliance schedule.
- Discharge ballast water to a facility onshore or to another vessel for treatment, or, do not discharge into US waters.
- Shipboard Technology Evaluation Program (STEP) participation.
- Provision for extraordinary circumstances non-compliance; and, a compliance date extension may be requested.


USCG FINAL RULE AMS OPTION

- Detailed process for obtaining AMS determination for foreign type-approved BWMS provided in USCG, CG-OES Policy Letter 12-01.
- BWMS manufacturer must submit a request in writing and include:
  - The type approval certificate;
  - Contact information of authority overseeing type approval;
  - Final test results, details and findings;
  - Description of any post-test system modifications;
  - Application for USCG type approval; and,
  - Completed AMS check-list.






USCG FINAL RULE "STEP" OPTION

- Detailed process for a vessel to participate in STEP is found in USCG Navigation and Vessel Inspection Circular (NVIC) 01-04 for experimental ballast water treatment systems.
- An accepted STEP vessel will be considered equivalent to ballast water discharge standards for up to 10 years or the life of the system, whichever comes first, while the system operates properly.
- The NVIC includes:
  - Acceptance process and period discussion;
  - Criteria and conditions for acceptance;
  - Instructions for application by vessel owner;
  - Required vessel documentation; and,
  - USCG verification check-list.
- Republic of the Marshall Islands type approved system is in STEP.


US EPA VESSEL GENERAL PERMIT

- BWM included in the National Pollutant Discharge Elimination System (NPDES) VGP program.
- Current VGP in force since December 2008 and expires December 2013. Proposed revision published 8 December 2011 with a final rule publication date no later than 30 November 2012, with entry into force 19 December 2013.
- VGP addresses 27 vessel discharges incidental to the normal operation of a vessel. No vessel specific permit involved, but vessels of 300 gross tons or greater or with ballast water capacity more than 8 m^3 must submit a Notice of Intent (NOI) to operate under the VGP in US waters.






US EPA VESSEL GENERAL PERMIT (continued)

- Includes requirements for:
  - Training;
  - Ballast water management plans, and expects USCG plan will be acceptable;
- Management options include:
  - BWTS shown to be effective in meeting the D-2 standard in accordance with ETV protocol;
  - Onshore treatment;
  - Use of public water supply;
  - No discharge of ballast water;
  - Interim requirement for ballast water exchange until treatment required; and
  - Participation in USCG STEP program.


US EPA VGP AND USCG FINAL RULE DIFFERENCES

- VGP has no provision for AMS use or time extension like USCG Final Rule.
- VGP requires ballast water exchange in addition to treatment for vessels en route in the Great Lakes, creating safety concerns.
- Implementation schedule for ballast water treatment now different than USCG schedule based upon definition of “new vessel.”
- USCG and VGP definition of “drydocking” for implementation schedule are different.
- VGP has specific requirements for treatment system monitoring along with maintenance of records on board and submission of monitoring records.
- VGP has BWTS “active substance” discharge limitations.


US EPA VGP AND USCG PORT STATE CONTROL (PSC)

- EPA VGP monitoring requirements provide some degree of PSC.
- USCG currently provides PSC service for EPA VGP compliance and will continue to do so.
- USCG Final Rule provides general PSC provisions.
- USCG NVIC 07-04, change 1, includes PSC provisions and provides detailed useful BWM compliance guidance for vessel owner/operator and but needs updating to reflect the shift to BWTS.

USCG AND EPA BWT IMPLEMENTATION DATES

	Ballast Capacity	Date Constructed (EPA in Red)	Compliance Date
New vessels	**All**	**On or after 1 DEC 2013** **After 1 JAN 2012**	**On delivery**
Existing vessels	**<1500 m^3**	**Before 1 DEC 2013** **Before 1 JAN 2012**	**First scheduled drydocking after 1 JAN 2016 (1)**
Existing vessels	**1500 m^3 to 5000 m^3**	**Before 1 DEC 2013** **Before 1 JAN 2012**	**First scheduled drydocking after 1 JAN 2014 (1)**
Existing vessels	**5000 m^3 or >5000 m^3**	**Before 1 DEC 2013** **Before 1 JAN 2012**	**First scheduled drydocking after 1 JAN 2016 (1)**

(1) USCG drydocking means placing a vessel in a drydock for an examination of all accessible parts of the vessel's underwater body. EPA means the foregoing or an underwater examination in lieu of drydocking (UWILD).


STATE ACTION

- The Clean Water Act permits US states to implement ballast water legislation more stringent than Federal standards.
- New York and California are most active and originally proposed treatment standards 100 and 1000 times more stringent than D-2.
- New York has extended its compliance deadline for ballast water treatment that exceeded the Convention D-2 standard to 19 December 2013, the current VGP expiration limit.
- The New York proposal to be included in the revised VGP adopts the D-2 standard but also requires ballast water exchange.
- California still maintains a ballast water discharge standard that far exceeds D-2.
- California enforcement regulations are under development.

LEGISLATION IN THE US CONGRESS

- There are legislative proposals in both the US House of Representatives and Senate to address commercial vessel discharges, including ballast water, that would:
  - Adopt the IMO Convention ballast water discharge standard D-2;
  - Adopt the USCG ballast water treatment rulemaking; and,
  - Preempt state regulation without federal approval.
- In effect, these proposals would amend the Clean Water Act to establish and implement uniform national standards for the regulation of ballast water discharges and other discharges incidental to the normal operation of vessels in place of the VGP.
- When will Congress act?


OVERALL IMPACT

- Business impacts include capital and installation costs and training, operation and maintenance costs. If technology improves after system installation, upgrading, and associated costs will be incurred.
- Failure to install in time could be a barrier to trade.
- Concerns over differing USCG and EPA ballast water treatment system implementation schedules, employment of systems type approved by other administrations and continued safety risk of ballast water exchange.
- If legislation is not passed, shipowners will face differing state standards as well.
- Strong need exists to harmonize these varying and contradictory US requirements either between the regulatory bodies or through the legislation.


WHAT'S NEXT?

- EPA Final VGP revision to be published by 30 November 2012. Will it harmonize current differences with USCG Final Rule?
- Federal legislation passed as proposed, modified or not passed?
- Further activity by states depending on status of federal legislation?
- Will full ratification or any changes to BWM Convention 2004 or adoption of port State control guidelines drive modifications to USCG rulemaking and EPA VGP?


RECOMMENDATIONS

- Given the foregoing, shipowners need to do considerable study to evaluate available treatment systems to meet their needs and develop a timely acquisition and installation plan.
- This would include:
  - A detailed review of manufacturer data concerning BWTS capacity and type approval testing actually performed; limitations re: salinity, temperature, turbidity, and suspended solids;
  - Flag administration type approval or acceptance; and, whether the manufacturer has applied or plans to apply for acceptance by USCG;
  - Determination as to whether the system has been shown effective by testing in accordance with the VGP and ETV protocol; and,
  - Review of the USCG Final Rule and Final VGP when available along with the impact of federal legislation, if enacted.

INFORMATION LINKS

- USCG Final Rule, FAQs, AMS and STEP details:
  - http://www.uscg.mil/hq/cg5/cg522/cg5224/bwm.asp
- EPA Current VGP, proposed VGP and Fact Sheet:
  - http://cfpub.epa.gov/npdes/vessels/vgpermit.cfm
- Republic of the Marshall Islands Guidance for VGP and BWM, including USCG Final Rule:
  - http://www.register-iri.com/forms/upload/MG-2-11-7.pdf
  - http://www.register-iri.com/forms/upload/MG-2-11-8.pdf
  - http://www.register-iri.com/forms/upload/MN-2-014-1.pdf
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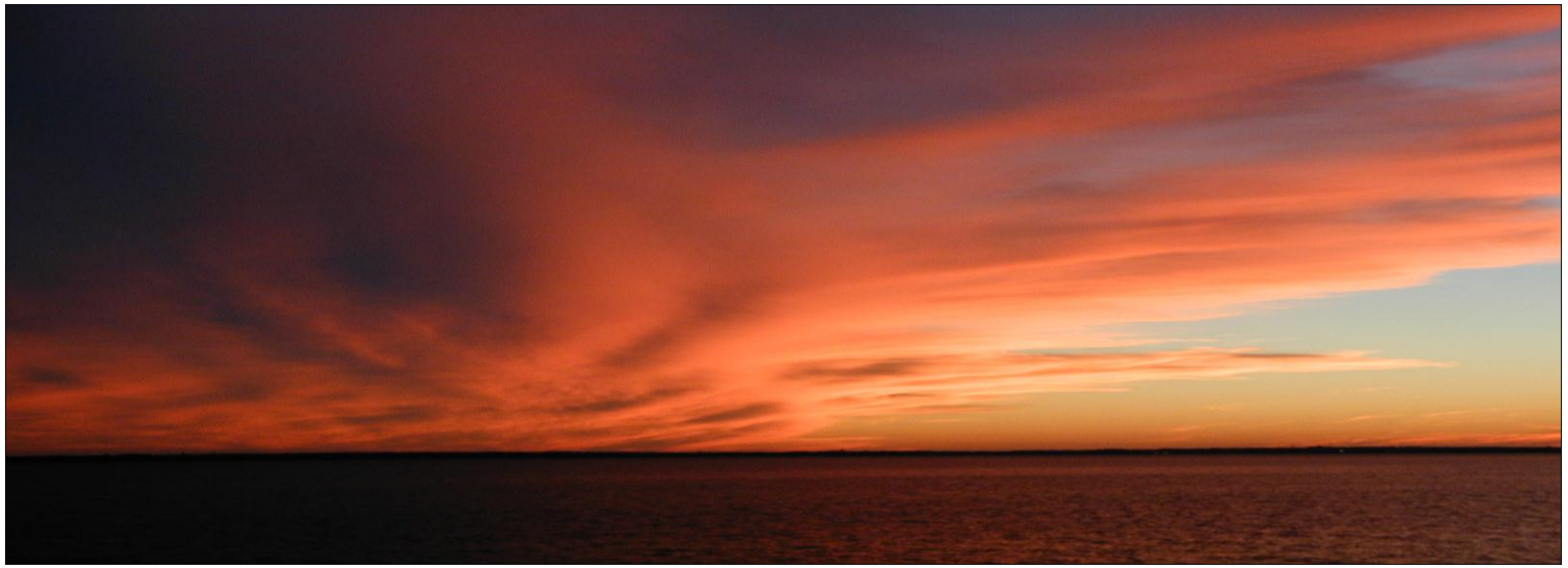

THANK YOU! QUESTIONS?

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