UNITED STATES BALLAST WATER MANAGEMENT (BWM) AND THE VESSEL GENERAL PERMIT (VGP)

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UNITED STATES (US) BWM OVERVIEW

- US is not a Party to the IMO BWM Convention 2004
- While Convention ratification status has no direct impact, the US Coast Guard (USCG) and the Environmental Protection Agency (EPA) have adopted some aspects of the Convention
- USCG and EPA separate statutory authorities require separate regulatory program by law
- USCG Final Rule published 23 March 2012 and effective 21 June 2012 is revision to current BWM rule that now includes treatment requirement
- EPA Proposed VGP includes ballast water treatment provisions; final revised VGP published 28 March 2013
US 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 may accept, on an interim basis, some “Alternate Management Systems” (AMS) type approved to G-8 by other administrations
- USCG may extend installation date on a case-by-case basis
- USCG FAQs are available as well as EPA VGP Fact Sheet, to further explain requirements
USCG BWM

- Application: All vessels, US and foreign, equipped with ballast tanks, that operate on the waters of the US, with some exceptions
- General requirements include BWM, record keeping and reporting
- BWM choices include: USCG approved BWM system to treat ballast water; use only water from a US public water supply; perform ballast water exchange more than 200 nautical miles (nm) offshore unless required to install and operate a ballast water treatment system or AMS; don’t discharge ballast water; or discharge to a facility on shore
- Foreign vessels traversing the territorial sea of the US but not entering or departing a port or navigating the internal waters of the US are exempt
EPA Final VGP and USCG Final Rule have a consistent implementation schedule, similar exemptions and EPA recognizes BW treatment systems with USCG Type approval and AMS approvals as meeting their requirements, but:

- VGP requires ballast water exchange in addition to treatment for vessels en route to the Great Lakes, creating safety concerns
- VGP has specific requirements for treatment system monitoring along with maintenance of records on board and submission of monitoring records to EPA as part of the Annual Report; USCG Final Rule is less specific
- VGP has treatment system “active substance” discharge limitations
- USCG may allow a time extension to meet treatment requirements but EPA is not obligated to accept such extensions
- USCG Final Rule requires compliance with EPA requirements
USCG AND EPA BALLAST WATER TREATMENT SYSTEM IMPLEMENTATION DATES

<table>
<thead>
<tr>
<th>Ballast Capacity</th>
<th>Date Constructed</th>
<th>Compliance Date</th>
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</thead>
<tbody>
<tr>
<td>New vessels</td>
<td>On or after 1 DEC 2013</td>
<td>On delivery</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing vessels</td>
<td>&lt;1500 m³</td>
<td>Before 1 DEC 2013</td>
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<tr>
<td></td>
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</tr>
<tr>
<td>Existing vessels</td>
<td>1500 m³ to 5000 m³</td>
<td>Before 1 DEC 2013</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Existing vessels</td>
<td>&gt;5000 m³</td>
<td>Before 1 DEC 2013</td>
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</table>

(1) Drydock means placing a vessel in a drydock for an examination of all accessible parts of the vessel's underwater body.
STATE AND CONGRESSIONAL ACTION

- New York and California are most active states and originally proposed treatment standards 100 and 1,000 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 and adopted D-2 for new VGP. However, NY requires ballast water exchange in addition to treatment for all NY waters. Maine and Rhode Island have a similar provision in the VGP.

- California still maintains a ballast water discharge standard that far exceeds D-2. California enforcement regulations continue to evolve.

- Congressional proposals to adopt the IMO Convention ballast water discharge standard D-2; the USCG ballast water treatment rulemaking; and, preempt state regulation without federal approval have not been successful.
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, to 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 along with the impact of future federal legislation, if enacted.
INFORMATION LINKS

- USCG Final Rule, FAQs, AMS and STEP details:

- EPA Current and new VGP and Fact Sheets:
  - [http://cfpub.epa.gov/npdes/vessels/vgpermit.cfm](http://cfpub.epa.gov/npdes/vessels/vgpermit.cfm)

- Republic of the Marshall Islands (RMI) Guidance for VGP and BWM including USCG Final Rule:
NPDES – VGP: 2013 REVISION

- Authority: US Clean Water Act
- First VGP entered into force DEC 2008, expires 18 DEC 2013
- New VGP published 28 MAR 2013, effective on 19 DEC 2013
- Application: vessels greater than 79 feet in length, operating within 3 nm of the US coast excluding recreational vessels and vessels of the armed forces
- Standards: requirements for 27 discharges incidental to normal vessel operations such as deck run-off, machinery cooling water, IGS scrubber, etc. are listed in the VGP
DISCHARGES SUBJECT TO VGP

- Deck washdown, runoff, hull cleaning above water line
- Bilgewater
- Ballast water
- Anti-fouling coatings
- Aqueous film forming foam (AFFF)
- Boiler / economizer blowdown
- Cathodic protection
- Chain locker effluent
- Oil to sea interfaces – stern tube
- Distillation brine
- Elevator pit effluent
- Firemain
- Freshwater layup
- Gas turbine wash water
- Graywater
- Motor gasoline and compensating discharge
DISCHARGES SUBJECT TO VGP (continued)

- Non-oily machinery wastewater
- Reefer and A/C discharge
- Seawater cooling overboard
- Seawater piping biofouling prevention
- Boat engine wet exhaust
- Sonar dome discharge
- Underwater ship husbandry discharges
- Welldeck discharges
- Graywater mixed with sewage
- Exhaust gas (SOx) scrubber wastewater
- Fish hold effluent
SOME MODIFIED AND NEW REQUIREMENTS

- Environmentally acceptable lubricants (EAL) for oil to sea interfaces such as stern tube, thrusters and rudder bearings, etc. must be used unless technically infeasible.
- If EAL not feasible, vessel documentation must explain why and non-use of EALs must be reported to EPA on the Annual Report.
- Exhaust gas scrubber water discharge limits and requirement for analytical monitoring.
- More electronic record keeping allowed.
- Quarterly discharge sampling requirement eliminated.
- Revised Annual Report process and combined Annual Reports permitted for some operators.
- Bilge water discharge sampling and monitoring requirements for some vessels built after 18 DEC 2013 and graywater monitoring for some vessels.
INSPECTIONS

- Routine Weekly Inspections: Conduct routine visual inspections of all areas addressed in VGP, at least once per week or per voyage, whichever is more frequent unless multiple voyages per day and then just once per day.

- Comprehensive Annual Inspections must cover all areas of the vessel subject to the VGP that can be inspected without drydocking.

- Vessel owner / operator must make any drydock reports by Class Society or flag administrations available to EPA or authorized representative; or, must prepare own drydock report and make available to EPA or authorized representative.

- If not operating regularly in US waters, a Weekly Inspection and an Annual Inspection must be completed before entry in US waters; if in US waters for more than one week, additional Weekly Inspections are required.
SHIPBOARD DOCUMENTATION

- Shipboard documentation necessary to comply with the VGP include:
  - The VGP and VGP Fact Sheet along with the records listed
  - No manner / format specified and in some cases existing record systems may be used
  - Records must be retained for three years
- Basic records to be maintained include:
  - All inspection activity including deficiencies found and corrective action taken
  - Any vessel specific requirements of EPA
  - Voyage log
  - VGP violations
  - VGP training
SHIPBOARD DOCUMENTATION (continued)

- Records may now be kept electronically, if:
  - Format can be read in manner similar to paper record
  - Legally dependable and no less evidentialy than paper record
  - Accessible to inspector to same extent as paper record
MORE RECORD KEEPING

- Additional maintenance and discharge records:
  - Deck maintenance
  - Bilge water discharge: dates, location, PPM oil, estimated volume
  - Anti-fouling paint application
  - AFFF discharge
  - Chain locker inspections
  - Stern tube and other oil-to-sea interface maintenance
  - Any emergencies requiring discharges in otherwise prohibited waters
  - Estimated volume and location of graywater discharge in waters subject to permit
  - Ballast water, including requirements in 33 CFR 151
REPORTING

- Submit Annual Report electronically to EPA by 28 FEB of following year
- No special new Permit report for 2013 but include any relevant information for 19 - 31 DEC 2013 in 2014 report
- Vessels covered under the 2008 Permit must submit Annual Report of non-compliance which occur before 18 DEC 2013
- New Annual Report replaces the 2008 annual non-compliance report and one-time report
- Provision for a combined Annual Report for unmanned barges or vessels less than 300 GT
- Oral report within 24 hours of any non-compliance that may endanger health or the environment
- Written follow-up to 24-hour report within five days
CURRENT VGP ENFORCEMENT

- Coast Guard Policy Letter 11-01 sets forth port State control (PSC) inspection and enforcement policy with inspections beginning 13 March 2011
- VGP is part of routine PSC inspections – no “special” inspection
- Policy letter includes PSC Officer “Job Aid” which addresses a list of minimum items PSC Officers should examine: “Depth and scope of the examination must be determined based upon the vessel, operation of its systems and competency of the vessel’s crew”
- State requirements are excluded from PSC inspection
- Connecticut VGP prohibits discharge of treated or untreated bilgewater and graywater and exhaust gas scrubber washwater discharge
CURRENT VGP ENFORCEMENT (continued)

Minimum that PSC will inspect:

- VGP and Fact Sheet on board
- Notice of Intent (NOI) and EPA receipt letter on board
- Inspection records available – Routine Visual, Annual and Drydock Inspections
- Any Corrective Action Assessments records must be aboard the vessel
- BWM Plan and records
- Bilge water discharge records – Oil Record Book Part I (no discharge in prohibited areas IAW VGP Part 12)
- State of deck and work area “housekeeping” – deck free of garbage, clutter, oil spills; spill rails and drip pans in place
ENFORCEMENT - VIOLATIONS

- **Initial Occurrence:** An initial occurrence of a problem where corrective action is necessary is considered a violation of the permit.

- **Each day a violation continues:** is considered a separate violation of the permit. A fine of up to $32,000 per day *could* be applied.

- **Failure to take the necessary corrective action within the stipulated time limit** constitutes an additional and independent permit violation.

- **Tampering With Devices:** A fine of not more than $10,000 or imprisonment for not more than two years, or both for falsification, tampering or knowingly rendering inaccurate a monitoring device or method required to be maintained under the permit. This penalty may be doubled for a subsequent conviction.

- **Falsifications:** A fine of not more than $10,000 per violation, or by imprisonment of not more than six months per violation, or both for false statement, representation or certification in any required record or document.
STATE REQUIREMENTS

Coastal and Great Lakes states and with additional requirements include:

- Alaska
- California
- Connecticut
- Georgia
- Hawaii
- Maine
- Michigan
- Minnesota
- New Hampshire
- New York
- North Carolina
- Ohio
- Rhode Island
- Vermont
- Washington
- Wisconsin
THANK YOU!
northstar@dmv.com