YOUR BIMCO GUIDE
TO PREPARE FOR

US NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM – VESSEL GENERAL PERMIT

CHAMBER OF SHIPPING
OF AMERICA

BIMCO

Introduction

This guide has been prepared to protect YOU – the crew – from unnecessary problems when calling at US ports or entering US waters.

Its purpose is to help you perform your duties in a way that fully complies with regulations in the US.

The guide will provide general advice. Detailed guidelines and instructions are available at EPA's homepage:

http://cfpub.epa.gov/npdes/home.cfm?program_id=350

What is it?

The National Pollutant Discharge Elimination System (NPDES) is a system under the US environmental protection rules (Clean Water Act) to minimize pollution within US territorial waters (3 nm). For ships greater than 79 feet in length, all the requirements are laid out in a document called the Vessel General Permit (VGP). These requirements are additional to international environmental rules such as MARPOL. The VGP establishes technology-based effluent (outflowing) limits for all vessels and for 26 specific discharges incidental to the normal operation of a vessel. In addition to these discharge and vessel specific requirements, extensive requirements are included for inspections, monitoring, reporting and record-keeping. Note that for most companies the VGP will require a detailed review of environmental protection systems, crew training and record-keeping. The rules have been in force since the beginning of 2009. It should be noted that any non-compliance with the VGP constitutes a violation of the US environmental rules and may lead to prosecution.

Which vessels are included?

In general, the VGP will apply to any commercial, non-fishing vessel greater than 79 feet in length, regardless of flag, trading within 3 nm of the US baseline. While each vessel will not be required to obtain an individual permit, most vessels will be required to file a notice of intent to receive coverage under the VGP and commit to meeting the discharge limitations included in the general permit for the specific discharges.

Vessels of 300 gross tons and above or vessels which have the capacity to hold/discharge more than 8 cubic metres of ballast water must submit a Notice of Intent (NOI). For vessels filing original NOIs, at least 30 days processing time must be allowed before the vessel will be deemed "covered" by the general permit. EPA may require additional information or time to review the NOI past the 30 days. Recommended submission method is via EPA's eNOI system at *http://cfpub.epa.gov/npdes/vessels/vesselsenoi.cfm* and filing must take place at least 30 days prior to the vessel's first entry into US territorial waters. The initial permits will be valid for 5 years.

Failure to file an NOI in a timely manner will result in non-coverage of discharges from the vessel under the permit and violations of the Clean Water Act, regardless of whether the vessel discharges were in compliance with the substantive permit requirements and even if the NOI has been filed but not yet processed (at least 30 day processing period as noted above).

Also note that filing provisions have been established for new vessels and vessels which will be transferred to new owners.

The general requirements applicable to all vessel discharges are found in this pamphlets in Parts 1 though 4; specific additional requirements that apply to particular vessel types are found in Part 5; specific additional requirements that apply in individual States or Tribal Lands are found in Part 6.

What is covered?

PART 1

The VGP covers a lot of requirements already implemented in the company's management system. However, an operator should carefully consider the implementation of the VGP requirements, which include:

- Requirements for **inspections, bespoke training, record-keeping and reporting**.
- General applicability to discharges incident to the normal operation of a vessel.
- Discharges from auxiliary vessels (lifeboats, rescue boats, barges loaded aboard larger vessels) covered under the notice of intent (NOI) submission for the larger vessel.
- Specific discharges not covered by the federal requirements of the VGP include sewage, used or spent oil, garbage or trash, photo processing effluent, dry cleaning effluent, medical wastes, noxious liquid substance residues, and tetrachloroethylene (percholoroethylene) degreasers.
- Some discharges may be covered by state specific provisions found in Part 6 and thus review of the state specific requirements for ports/waters to/in which the vessel is expected to trade is critical.

Effluent limits and related requirements

PART 2

Technology-based effluent limits and related equipment applies to all vessels. That includes:

- Best practices defined for material storage (minimize exposure time of residues on deck which may be blown or washed overboard, secure and covered storage locations), toxic and hazardous materials (sealed and appropriate containers, minimize exposure to weather), fuel spills/overflows (minimize, prompt containment and clean-up, crew training), discharges of oil including oily mixtures (consistent with MARPOL Annex I and/or 33 CFR 151.09, IOPCC required for MARPOL vessels, substantial equivalent recommended for non MARPOL vessels).
- The vessel must continue to meet requirements of all applicable statutes and regulations.

Technology-Based Effluent Limits – The Specific Discharge Categories

The included discharges are: deck washdown and runoff; bilge water; ballast water; anti-fouling coatings; aqueous film forming foam (AFFF); boiler/economizer blowdown; cathodic protection; chain locker effluent; controllable pitch propeller and thruster hydraulic fluid and other oil-to-sea interfaces including lubrication discharges from paddle wheel propulsion, stern tubes, thruster bearings, stabilizers, rudder bearings, azimuth thrusters, propulsion pod lubrication, and wire rope and mechanical equipment subject to immersion; distillation and reverse osmosis brine, elevator pit effluent; fire-main systems; freshwater layup; gas turbine wash water; gray water; motor gasoline and compensating discharge; non-Oily machinery wastewater; refrigeration and air condensate Discharge; seawater cooling overboard discharge; seawater piping biofouling prevention; small boat engine wet exhaust; sonar dome discharge; underwater ship husbandry discharges; welldeck discharges; gray water mixed with sewage from vessels; exhaust gas scrubber washwater discharge.

Effluent limits and related requirements (cont.)

PART 2

Water Quality Based Effluent Limits

The VGP permit includes water quality based effluent limits to control discharges as necessary to meet the applicable water quality standards in US. With that background, EPA generally expects water quality compliance to be achieved by the requirements and limits to meet the technological based standards. EPA may impose additional water quality-based limitations on a site specific basis if the vessel's discharge does not respect the water quality standards in the US. Such special requirements will be communicated to the vessel's operator through direct contact or suitable posting of requirements.

Corrective action

PART 3

Corrective action is follow-up action a vessel must take to correct problems identified in an inspection or otherwise. That includes:

- If accidental discharge occurs or limits are exceeded a vessel must immediately initiate corrective action, including a description of the problem (reporting to EPA within 24 hours for discharges that endanger human health or the environment). The cause should be identified and corrective actions initiated, including a time line for corrective action. All of this should be documented through appropriate record-keeping.
- Non-compliance with many VGP conditions e.g. good housekeeping can be corrected immediately and does not require further action.
- A corrective programme will be required in connection with more serious problems e.g. violation of effluent limits, identification of situations where control measures are insufficient to meet applicable water quality standards or failure of pollution control equipment (operation and maintenance programs included).
- Depending on the complexity of the problem, the time frame for correction of deficiencies varies. Some must be corrected immediately; others within 2 weeks, some within 3 months and some can wait until the next dry docking.
- Note that non-compliance constitutes a permit violation; failure to conduct and implement a corrective action programme constitutes a separate permit violation.

Inspections, monitoring, reporting and record-keeping

PART 4

Extensive requirements are included for inspections, monitoring, reporting and record-keeping. The ship's watch shall include visual monitoring for discharged pollutants originating from the vessel. That includes:

- Establishing requirements for routine visual inspections at least once per week or per voyage, discharge sampling once per quarter for waste streams not compatible with visual inspection e.g. below water line discharges, comprehensive annual vessel inspections and dry-dock inspections. These samples must be visually assessed for discoloration, sheen, solids, foam, and clarity (no lab analysis is required). EPA has advised that vessels are not required to conduct these inspections when they are outside US territorial waters (3 nm), but must be in compliance when entering US territorial waters.
- Various requirements for documenting inspections in vessel documentation and/or logbook; dry-dock reports prepared by class or USCG.
- Specific record-keeping criteria are provided.
- Additional record-keeping for vessels with ballast tanks consistent with existing 33 CFR 151.2045 including documentation of saltwater flushing where required.
- Various reporting requirements including non-compliance events, discharges of reportable quantities of hazardous substances or oil, standard permit reporting requirements in 40 CFR 122.41 and a one-time permit report which must be submitted between 30 and 36 months after obtaining permit coverage.
- Records should be maintained to demonstrate that the crew has attended appropriate training regarding the VGP.
- Corrective actions must be taken and documented if any of the inspections or visual monitoring indicates non compliance (see Part 3).
- Certification text must be included in any NOI and any required reports to EPA.
- A valid VGP may be modified or revoked prior to expiry date for a variety of reasons including the need for more protective standards due to applicable water quality standards and/or the availability of new pollution control technologies.

Vessel class-specific requirements

PART 5

Large Cruise Ships (500 or more passengers)

- Additional requirements for gray water discharges including discharge location and rate, treatment standards, pool/spa discharges, other materials, monitoring and crew education and training requirements.

Medium Cruise Ships (100-499 passengers)

- Additional requirements for gray water discharges including discharge location and rate, treatment standards, pool/spa discharges, other materials, monitoring and crew education and training requirements.
- Defined as vessels that carry passengers and vehicles for hire which carry more than 100 tons of cars, trucks, trains or other land-based transportation equipment.
- Additional requirements for deck water run-off, gray water management and crew education and training.

Barges

- Minimize contact of below deck condensate with oily or toxic materials.
- No discharge of oily mixtures in harmful quantities.
- Visible sheen triggers a corrective action programme.
- Tank barges must have spill rails and plugged scuppers while engaged in cargo operations.
- Clean out cargo tanks to minimize cargo residues prior to washing and discharge overboard.
- A visual sheen test to be conducted after every below deck pump out or deck wash-down.

Oil Tankers and Petroleum Tankers

- Effluent from inert gas scrubbers may be discharged under this permit, but should be minimized as much as feasible.

Vessel class-specific requirements (cont.)

PART 5

- Discharges from deck seals permitted when installed as part of inert gas system.
- Scuppers plugged during cargo operations.
- A visual sheen test to be conducted after every cargo operation or deck washdown.
- Crew education and training requirements.

Vessels employing experimental Ballast Water Treatment Systems

- Any system using a biocide is deemed "experimental" under the VGP.
- Requires monitoring of ballast water discharge for residual biocide components.
- May not use a biocide that is considered a "pesticide" under FIFRA unless it has been registered for use in ballast water treatment, but this provision does not apply if the biocide is generated on board by a "device" per FIFRA.
- Total Residual Chlorine (TRC) may not exceed 100 micrograms per litre as an instantaneous maximum.
- Other biocides or derivatives may not exceed "Gold Book" values (EPA 1986 Quality Criteria for Water found at www.epa.gov/waterscience/criteria/library/goldbook.pdf.
- Annual Whole Effluent Toxicity (WET) testing required for ballast water discharge samples for systems using biocides not included in Gold Book.
- Initial compliance to be shown by taking 5 samples over a 90 day period.
- Ongoing compliance via quarterly sampling of ballast water discharge for systems using biocides in Gold Book; annual WET tests for systems using biocides not in Gold Book.
- Records of sampling and testing to be retained for 3 years.
- Sampling and monitoring data to be submitted annually to EPA (hard copy initially, but via e-reporting system once operational).

Specific requirements for individual states or Indian country lands

PART 6

Specific and very detailed requirements have been added by certain states. The reader is urged to carefully review these requirements and, where trading routes so dictate, to incorporate these requirements into their VGP compliance programmes. It is important to note that while certain discharges are permitted under the general provisions, some of these discharges are prohibited in all or in part by certain state provisions found in this section. In addition, certain states have expanded the applicability of the EPA NOI provisions to smaller vessels, have created additional reporting requirements and have created special permit application requirements for vessels discharging in state waters.

States with additional requirements of relevance to BIMCO and CSA members and colleague trade associations include (parentheticals indicate specific discharges addressed but are not exhaustive due to general requirements in state submissions that apply to all dischartes): California (applicability, ballast water, propeller/hull cleaning, gray water, monitoring and reporting), Connecticut (ballast water, gray water), Florida (discharge standard for oils and greases), Georgia (gray water), Illinois bioaccumulative chemicals of concern, bilge water, ballast water, black water, gray water), Indiana (ballast water), Maine (prohibited discharges, hull cleaning), Massachusetts (ballast water, gray water, seawater piping biofouling prevention, underwater ship husbandry discharges, gray water mixed with sewage), Michigan (ballast water, black water, Minnesota (ballast water), New Jersey (gray water, bilge water), New York (ballast water, gray water, bilge water), Ohio, (ballast water, Rhode Island (general requirements not addressing specific discharges).

BIMCO – Reflecting your interests

BIMCO is an independent international shipping association comprised of ship owners, managers, brokers, agents and many other stakeholders with vested interests in the shipping industry. The association acts on behalf of its global membership to promote higher standards and greater harmony in regulatory matters. It is a catalyst for the development and promotion of a fair and equitable international shipping policy.

"EPA appreciates the efforts of associations such as BIMCO for their efforts in educating ship owners and managers on the requirements of the vessel general permit. Efforts such as this pamphlet promote a cooperative relationship among EPA and these parties in achieving the goal of protecting water quality while ensuring the successful operations of the maritime industry."

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