



**REPUBLIC OF
THE MARSHALL ISLANDS**

**OFFICE OF THE
MARITIME ADMINISTRATOR**

Marine Guideline

No. 2-11-7

Rev. 2/09

TO: ALL SHIPOWNERS, OPERATORS, MASTERS AND OFFICERS OF MERCHANT SHIPS, AND RECOGNIZED ORGANIZATIONS

SUBJECT: U.S. Permit Requirements for Discharges Incidental to Normal Vessel Operations – Commercial Vessels and Certain Fishing Vessels.

References:

- (a) Marine Notice 2-011-30**
- (b) 73 *Federal Register* 79473-79481**
- (c) Final NPDES General Permit for Discharges Incidental to the Normal Operation of a Vessel**
- (d) Final Fact Sheet on NPDES Vessel General Permit for Discharges Incidental to the Normal Operations of Vessels (18 December 2008)**

PURPOSE:

This Marine Guideline is to be used in conjunction with Marine Notice 2-011-30, which details requirements for vessels subject to the United States (U.S.) Environmental Protection Agency's (EPA) Vessel General Permit (VGP) for discharges incidental to normal vessel operations.

Part I of this Guideline contains:

Model Record Book: *Voyage Log, Effluent Limit Violations Log, Routine Visual Inspection Log, Cargo Operations Log, Quarterly Sampling Log, Annual Inspection Log, Additional Maintenance and Discharge Information Log, Drydock Inspection Log, Corrective Action Assessment Log and Training Records Log.*

This Model Record Book also contains:

- Appendix A – NPDES VGP Inspection Report
- Appendix B – Vessel Copy of Notice of Intent (NOI)
- Appendix C – Summary of Effluent Discharges

Part II of this Guideline contains a chart summarizing State requirements with which vessels will need to comply that are in addition to or differ from those contained in the NPDES VGP.

This Guideline supersedes the original issue of 11/08.

PART I

**National Pollution Discharge Elimination System (NPDES)
Record Book**

Vessel Name _____

IMO Number _____

Vessel Type _____

Owner _____

Address _____

Operator _____

Address _____

Certifying Official _____

Gross Tonnage _____

Call Sign _____

Port of Registry _____

NPDES Compliance Guidelines and Instructions for the Model Record Book

A. Background

The National Pollution Discharge Elimination System (NPDES) is established under the authority of the Clean Water Act (CWA). Under the NPDES, certain discharges, incidental to the normal operation of commercial vessels of 79 feet or greater in length will be regulated under the terms of a Vessel General Permit (VGP) beginning on 6 February 2009. The Permit is applicable to discharges identified in Part 1.2.2 of the VGP when vessels are operating in waters subject to the Permit. These waters are “waters of the United States” as defined in 40 CFR 122.2 (extending to the outer reach of the 3 mile territorial sea as defined in Section 502(8) of the CWA). This includes all navigable waters of the Great Lakes subject to the jurisdiction of the U.S. Additionally, vessels of 300 GT or more, or, those that have capacity to hold or discharge more than eight (8) cubic meters of ballast water, must submit a Notice of Intent (NOI) to operate under the VGP in accordance with Part 10 of the VGP. The VGP requirements address 25 basic potential vessel discharges by establishing numerical effluent limits for some streams and imposing Best Management Practices (BMP) for others where numerical limits are not practicable; and, incorporate the U.S. Coast Guard’s (USCG) ballast water management and exchange standards. Not all discharges are applicable to every vessel so ship owners/managers and vessel crews need only conduct operations to address discharges applicable to their vessel. There are some additional discharges listed for specific vessel classes – cruise ships, ferries, barges, oil tankers, research vessels, emergency vessels like fireboats and vessels employing experimental ballast water treatment systems (BWTS).

B. References

The VGP and VGP Fact Sheet describe detailed requirements of the NPDES VGP and are found on the EPA website at: <http://cfpub.epa.gov/npdes> (click on “Final 2008 VGP”).

C. Effluent Discharge Standards – Federal, State and American Indian Tribal Lands

A list of discharges permitted under the VGP and a summary of effluent discharge standards are found in Appendix C to this Record Book. Detailed requirements may be found in the VGP and VGP Fact Sheet. In addition to the federal requirements under the CWA there are additional requirements of States and American Indian Tribal Lands listed in Part 6 of the VGP.

D. Vessels Arriving From Outside Permit Waters

While VGP effluent limitations only apply while vessels are operating within Permit waters, vessels arriving from outside Permit waters must have conducted a routine inspection within the last week or during the voyage, whichever is more frequent, and have had a comprehensive annual inspection within the last year, prior to entering. Also, an NOI is required pursuant to Part 1.5.1.1 of the VGP and the schedule in Table 1 of the VGP.

E. NPDES Required Documentation and Records

This NPDES Record Book provides a template with instructions for documenting activities “1” through “10” noted below required under the VGP:

1. **Voyage Log**
2. **Effluent Limit Violations Log**
3. **Routine Visual Inspections Log** (See Appendix A for NPDES VGP Inspection Report)
4. **Cargo Operations Log**
5. **Quarterly Sampling Log** (See Appendix A for NPDES VGP Inspection Report)
6. **Annual Inspection Log** (See Appendix A for NPDES VGP Inspection Report)
7. **Additional Maintenance and Discharge Information Log**
8. **Drydock Inspection Log**
9. **Corrective Action Assessment Log** (To be accomplished in accordance with the VGP Part 3)
10. **Training Records Log**
11. **Ballast Records**

For those vessels currently subject to federal requirements, ballast records are separately maintained in accordance with 33 CFR 151 along with the Ballast Water Management Plan. Vessels currently not subject to federal ballast water requirements, but that have the capacity to hold or discharge at least eight (8) cubic meters of ballast water must maintain ballast water records in accordance with the VGP.

12. Other Documentation Requirements

Any other documentation requirements under the VGP are either described in this Record Book or a location for those records is noted in this Record Book.

F. Appendices

Appendix A: NPDES VGP Inspection Report

Appendix B: Vessel Copy of Notice of Intent (NOI)

Appendix C: Summary of Effluent Discharge Standards

PART I

1. VOYAGE LOG

A Voyage Log must be maintained, including dates and ports of arrival, vessel agent(s), and last and next ports and countries of call (when known).

Voyage No.	Arrival Date	Agent	Arrival Port and Country	Last Port and Country	Next Port and Country

2. EFFLUENT LIMIT VIOLATIONS LOG

Documentation of effluent limit violations, including:

Date of Violation	Description of Violation	Violation Discovered by:	This Record Made by:	Corrective Action Assessment Record
		Name _____ Title _____ Signature _____	Name _____ Title _____ Signature _____	Attached or Located: _____ Previous action located: _____
		Name _____ Title _____ Signature _____	Name _____ Title _____ Signature _____	Attached or Located: _____ Previous action located: _____
		Name _____ Title _____ Signature _____	Name _____ Title _____ Signature _____	Attached or Located: _____ Previous action located: _____
		Name _____ Title _____ Signature _____	Name _____ Title _____ Signature _____	Attached Located: _____ Previous action located _____

3. ROUTINE VISUAL INSPECTION LOG

Routine visual inspections of all areas addressed in this Permit should be conducted on a schedule that coincides with other routine vessel inspections if feasible, but, must be conducted at least once per week or per voyage, whichever is more frequent. Such inspections must include, but not limited to cargo holds, boiler areas, machinery storage areas, welldecks, and other deck areas. Ensure these areas are clear of garbage, exposed raw materials, oil, any visible pollutant or constituent of concern that could be discharged in any waste stream, and that pollution prevention mechanisms are in proper working order. At a minimum, the routine inspection must verify that requirements of section 2.1 of the VGP, effluent limits, as also noted in Appendix C to this Record Book, are being met and document any instances of non-compliance. Routine inspections, must include a visual inspection of safely accessible deck and cargo areas and all accessible areas where chemicals, oils, dry cargo or other materials are stored, mixed, and used, whether or not the areas have been used since the last inspection. Furthermore, the inspection should verify whether all monitoring, training, and inspections are logged according to Permit requirements.

Routine visual inspections should be completed using the NPDES VGP Inspection Report found in Appendix A to this Record Book. Each inspection should be logged here and the corresponding completed NPDES VGP Inspection Report maintained in a file aboard the ship.

In addition to a routine inspection weekly or once per voyage, a ship's watch must include visual monitoring of the water around and behind the vessel for visible sheens, dust, chemicals, abnormal discoloration or foaming, and other indicators of pollutants or constituents of concern originating from the vessel. Particular attention should be paid to deck runoff, ballast water, and bilgewater. If pollutants or constituents of concern are determined to be originating from the vessel, corrective actions must be initiated.

Date and time of inspection	Name of inspector and signature	Summary of any potential problems and sources of contamination found and if any corrective actions needed

3. ROUTINE VISUAL INSPECTION LOG

Date and time of inspection	Name of inspector and signature	Summary of any potential problems and sources of contamination found and if any corrective actions needed

4. CARGO OPERATIONS LOG

After every instance of loading or unloading operations or immediately following washing down the decks, a visual sheen test must be conducted. The visual sheen test is used to detect free oil by observing the surface of the receiving water for the presence of an oily sheen. The owner/operator should focus the inspection on the area surrounding the vessel where effluent from loading operations or deck washings discharge into the receiving water. A sheen is defined in Part 7 of the VGP. If a visible sheen is observed, all requirements contained in Part 4.4 of the VGP must be complied with and corrective actions required in Part 3 of the VGP must be initiated.

Date and time of inspection	Name of inspector and signature	Summary of any potential problems and sources of contamination found and if any corrective actions needed

5. QUARTERLY SAMPLING LOG

At least once per quarter, any discharge stream such as bilgewater or graywater if accessible that is not readily visually inspected, such as effluent streams discharged below the water line, must be sampled. Samples must be inspected for any signs of visible pollutants or constituents of concern, including discoloration, visible sheens, suspended solids, floating solids, foam, or changes to clarity. If signs of oil, other pollutants, or other constituents of concern exceeding the applicable effluent limit are discovered, steps must be taken to prevent the continued discharge of these pollutants or constituents of concern and corrective actions taken to remediate the problem(s) and these actions recorded.

Quarterly Sampling should be completed as a part of a routine visual inspection using the NPDES VGP Inspection Report found in Appendix A to this Record Book. Each Quarterly Sampling should be logged here and the corresponding completed NPDES VGP Inspection Report maintained in a file aboard the ship.

Sampling of readily visible discharges is not required, but is recommended if the inspector cannot easily view their discharge characteristics (such as clarity or discoloration, presence of oily sheens, presence of foams, etc.). The vessel owner/operator and master are responsible for assuring that all discharges comply with the effluent limits in Part 2 of the VGP and these visible inspections are one such tool a Master or owner/operator may use.

Date and time of inspection	Name of inspector and signature	Note location of any visual sampling and observations, any potential problems and sources of contamination found and any corrective actions taken.

6. ANNUAL INSPECTION LOG

Comprehensive annual inspections must cover all areas of the vessel affected by the requirements of the VGP that can be inspected without drydocking a vessel. Special attention should be paid to those areas most likely to result in a discharge likely to cause or contribute to exceedances of water quality standards or violate effluent limits established in the VGP. Areas that inspectors must examine include, but are not limited to: vessel hull for attached living organisms, flaking antifoulant paint, exposed Tributyltin (TBT) or other organotin surfaces; ballast water tanks, as applicable; bilges, pumps, and oily water separator (OWS) sensors, as applicable; protective seals for lubrication and hydraulic oil leaks; oil and chemical storage areas; cargo areas, and waste storage areas; and, all visible pollution control measures to ensure that they are functioning properly. Note areas that cannot be inspected without drydocking the vessel.

Annual inspections should be completed using the NPDES VGP Inspection Report found in Appendix A to this Record Book. Each inspection should be logged here and the corresponding completed NPDES VGP Inspection Report maintained in a file aboard the ship.

Date of Inspection	Name of inspector and signature	Summary of any potential problems and sources of contamination found and if any corrective actions needed.

7. ADDITIONAL MAINTENANCE AND DISCHARGE INFORMATION LOG

The following additional information must be kept in a record on the vessel. Existing records may be used for this purpose and location of the information noted in this Record Book.

1. Deck maintenance: Record dates, materials used, application process, etc. for any maintenance of the deck surface that involve more than routine daily cleaning activities such as sweeping.
2. Bilgewater: Record dates, location, oil concentration (for MARPOL vessels) or visible sheen observation (non-MARPOL vessels) and estimated volume of bilgewater discharged whether discharged overboard or to shore reception facilities.
3. Anti-fouling paint application: record dates, materials used, application process, etc. for any anti-fouling paint applied to the vessel.
4. Aqueous Film Forming Foam (AFFF): Record dates, estimated volumes, and constituents of any discharges of AFFF.
5. Chain locker inspections: Dates of inspections and any rinsing conducted within waters subject to the VGP.
6. Maintenance of oil-to-sea interfaces: Record dates and locations of any maintenance of stern tube, thrusters, controllable pitch propellers or any other such equipment that occurs while vessel in waters subject to the VGP.
7. Any emergencies requiring discharges otherwise prohibited in waters listed in Part 12.1 of the VGP.
8. Gas turbine wash water: record dates and estimated volume of any discharge within waters subject to the VGP. If disposed of ashore, record hauler and volume.
9. Estimated volume and location of graywater discharged while in waters subject to the VGP.

Date	Discharge Type	Record Location	Comments

8. DRYDOCK INSPECTION LOG

Vessel owner/operators must make any drydock reports prepared by the class society or their flag administrations available to EPA or an authorized representative of EPA upon request. If the ship owner/manager does not have a drydock report from either of these entities, the ship owner/manager must prepare their own drydock report and it must be made available to EPA or an authorized representative of EPA upon request. The drydock report must note that: the chain locker has been cleaned for both sediment and living organisms; the vessel hull, propeller, rudder, thruster gratings, sea chest, and other surface areas of the vessel have been inspected for attached living organisms and those organisms have been removed or neutralized; any anti-foulant hull coatings have been applied, maintained and removed consistent with the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) label if applicable; any exposed existing or any new coating does not contain biocides or toxics that are banned for use in the United States; all cathodic protection, anodes or dialectic coatings have been cleaned and/or replaced to reduce flaking; and, all pollution control equipment is properly functioning.

Date of inspection	Name of inspector and signature	Note locations inspected, location of any visual sampling and observations, any potential problems and sources of contamination found and any corrective actions taken

9. CORRECTIVE ACTION ASSESSMENT LOG

Vessel _____

Date _____

Reference to incident, inspection or sampling that identified need for corrective action _____

Description of corrective action to be taken:

Schedule of activities to complete the corrective action within VGP timeframes:

Does the corrective action require the vessel to be drydocked? Yes _____, No _____

If yes, the next scheduled drydocking is _____

Corrective action implemented:

Date _____

Time _____

Description of corrective action:

Name: _____ Title _____ Signature _____

10. TRAINING RECORDS LOG

All crew must be trained in basic shipboard environmental procedures and demonstrate proficiency. Crew directly involved in managing specific discharge types or responsible for specific areas of the ship must be trained in advanced shipboard environmental management procedures. Demonstration of proficiency of personnel in implementing the procedures required.

Education and training requirements are documented in the _____, along with reprimand procedures for crew whose actions lead to violations. Training records are maintained as noted below.

Date	Type of Training	Detailed Training Record Location	Comments

Appendix A: NPDES VGP Inspection Report

Date: _____ Vessel Name: _____ IMO: No.: _____

Inspection type: Routine Visual _____ Quarterly Monitoring _____ Annual _____

Owner: _____ Manager: _____

Location: _____ Agent (in port): _____

Vessel Type: _____ GT: _____ DWT: _____ Registry: _____

Propulsion/Power: _____ Keel Laid: _____ Delivered: _____

Master: _____ Chief Engineer: _____

Last Drydock Inspection conducted: Date _____ by _____

Report located on ship _____

DECK AREAS

1. Deck Maintenance and cleanliness

- Avoid washdowns in port. Washdowns are conducted with non-toxic and phosphate free, biodegradable, minimally caustic cleaners/detergents. Washdowns are free from floating solids, visible foam, halogenated phenol compounds, dispersants and surfactants.
- Decks clear of debris, garbage, exposed raw materials, oil, any visible pollutant or constituent of concern that could be discharged in any waste stream.
- Deck areas maintained to minimize discharge of rust and other materials associated with topside surface preservation.
- Deck machinery drip pans drained to waste container for proper disposal or periodically wiped/cleaned.

2. Stowage of pollutants: Materials properly stowed, free of leaks and spills, containers appropriate to product, sealed and labeled.

- Paint Locker
- Oil Spill Response Equipment Locker
- Cabin Stores Locker
- Bosn's Locker
- Foam Room
- Other storage of materials in deck area

3. Spill containment arrangements: Intact, no leakage, any spillage removed.

- Bunker manifolds
- Cargo manifolds
- Fuel oil and lube oil vents
- Scuppers plugged during any oil transfer operations and first response equipment deployed

4. Ballast water management

- Ballast Water Management Plan IAW IMO A.868(20) and current
- Ballast records up to date
- Reports to NBIC
- Records retained for three (3) years

5. **Garbage**

- Storage area located aft and stowage secure. Stowed garbage effectively protected from wind, rain and spray
- Garbage Plan and disposal Record Book current

6. **Fire main**

- Confirm fire and foam stations inspected on regular basis
- No foam discharge in VGP waters
- Fire main water discharge in VGP waters minimized

7. **Visual monitoring**

- Visual observation of water from deck around vessel for any evidence of visible sheens, foaming, dust, chemicals, discoloration or other evidence of pollution originating from the vessel
- Locations:

8. **Quarterly sampling conducted of overboard discharges not readily visibly inspected:**

- Yes - Note effluents sampled and if samples are clear or contain any sign of oil sheen, discoloration, suspended or floating solids, foam or any other constituents of concern
- No

Discharge	Sampling Results
Ballast water	

9. **Chain locker sump**

- Confirmed pumped out on a regular basis more than 50 nm from shore and recorded
- Confirmed pumped out prior to entering VGP waters

10. **Documentation**

- Log entries for training, monitoring and inspections verified

11. **For tankers**

- ODME tested for satisfactory operation and noted in Oil Record Book
- Oil transfer procedures current
- IGS Deck Water Seal inspected quarterly; last inspection date: _____
- Cargo structural boundaries, venting and gauging systems intact
- Cargo Pump room inspected for evidence of cargo or ballast water leakage

Deck Area Comments: Note any potential problems and sources of contamination found and any corrective actions taken.

Deck Area Comments (continued):

ENGINEERING SPACES AND SYSTEMS

12. Graywater

- Graywater discharge minimized within Permit waters
- Sufficient supply of non-toxic, phosphate free, bio-degradable soaps and detergents available for use while vessel in Permit waters
- Oils used for cooking not discharged into graywater system but collected and temporarily stored on board

13. Sewage

- Treatment system functioning properly
- Holding tanks capacity adequate until discharge permitted

14. Machinery

- Main and auxiliary engines and purifier cleanliness
- Bilge area maintenance and cleanliness

15. Oil Water Separator and Oil Content Meter

- Tested for satisfactory operation and recorded in Oil Record Book

16. Seawater piping and systems

- Pumps and machinery inspected for excessive saltwater leakage
- Biofouling management inspections conducted of heat exchangers per manufacturer's instructions
- Any biofouling removal not discharged in Permit waters

17. Stowage areas: Materials properly stowed, free of leaks and spills; containers appropriate to product, sealed and labeled

- Packaged oils and greases
- Chemicals

18. Steering gear room

- Inspected for excessive leakage of hydraulic fluid

19. Emergency generator room

- Inspected for fuel and lube oil leakage

20. Bottled gas stowage

- Refrigerant gasses
- Oxy-acetylene
- Other

21. Boiler/economizer blowdown

- Use minimized in Permit waters

22. Underwater body cathodic protection

- Check of ICCP system records conducted

23. Inert gas scrubber

ANNUAL INSPECTION ITEMS

27. **Annual Inspection additional items: Note items inspected and results or items referred to drydock examination**

Area Inspected	Drydock Required	Inspection Results
Hull inspected for living organisms		
Flaking anti-fouling paint		
Exposed TBT or other organotin		
Ballast water tanks internal exam		
Actual oil to sea interfaces		

CERTIFICATION

Based upon the: (Routine Visual, Quarterly Monitoring or Annual Inspection) _____
as noted in this document, we confirm that the vessel complies with the VGP requirements:

Yes _____ No _____

Comments:

Master: Name: _____ Signature: _____

Chief Engineer: Name: _____ Signature: _____

Inspector if other than Master and Chief Engineer:

Name: _____ Signature: _____

Appendix B: Vessel Copy of Notice of Intent (NOI)

A copy of the ship's NOI filed by the ship owner/manager pursuant to section 1.5 of the VGP for vessels over 300 GT or that have the capacity to hold or discharge at least 8 cubic meters of ballast water should be placed here.

Appendix C: Summary of Effluent Discharge Standards

DISCHARGE TYPE	STANDARD
1. Deck Washdown and Runoff and Above Waterline Hull Cleaning Ref: VGP 2.2.1 VGP Fact Sheet 4.4.1	Minimize washdowns in port. Clear decks of debris, garbage, residue and spills prior to washdowns. Maintain topside surface to minimize discharge of rust and other materials associated with topside surface preservation. Vessels (e.g. oil tankers), should be fitted with and use perimeter spill rails and scuppers and have coamings or drip pans for machinery on deck. Drip pans must be drained to waste container for proper disposal or periodically wiped/cleaned. Discharges must be conducted with non-toxic and phosphate free, biodegradable, minimally caustic cleaners/detergents. Free from floating solids, visible foam, halogenated phenol compounds, dispersants and surfactants.
2. Bilge Water Ref: VGP 2.2.2 VGP Fact Sheet 4.4.2	<ul style="list-style-type: none"> • Zero discharge standard for untreated bilge water. • Zero discharge standard for treated bilge water into federal conservation areas.
3. Ballast Water Ref: VGP 2.2.3 VGP Fact Sheet 4.4.3	Follow Ballast Water Management Plan
4. Anti-fouling hull coating Ref: VGP 2.2.4 VGP Fact Sheet 4.4.4	Zero discharge standard for tributyltin (TBT): Vessels with existing exposed coating must seek individual NPDES Permit coverage, overcoat or remove existing TBT coating.
5. Aqueous Film Forming Foam (AFFF) Ref: VGP 2.2.5 VGP Fact Sheet 4.4.5	No discharge within one (1) nm of waters, unless for emergency purposes. Record explanation of emergency in ship's log. Discharge of AFFF for maintenance and training purposes is prohibited. Substitute non-fluorinated foaming agent when discharging for regulatory certification.
6. Boiler/Economizer Blowdown Ref: VGP 2.2.6 VGP Fact Sheet 4.4.6	Minimize blowdown in port if chemicals or other additives are used to reduce impurities or prevent scale formation. Vessels greater than 400 GT that leave U.S. territorial seas at least once per week are prohibited from discharging blowdown within three (3) nm of shore, except for safety purposes. No vessel may discharge blowdown in or within one (1) nm of federal conservation waters, except for safety purposes.

DISCHARGE TYPE	STANDARD
7. Cathodic Protection Ref: VGP 2.2.7 VGP Fact Sheet 4.4.7	
8. Chain Locker Effluent Ref: VGP 2.2.8 VGP Fact Sheet 4.4.8	Ocean-going vessels must clean out, rinse or pump out chain lockers in open water greater than 50 nm from shore.
9. Controllable Pitch Propeller Hydraulic Fluid Ref: VGP 2.2.9 VGP Fact Sheet 4.4.9	
10. Distillation and Reverse Osmosis Brine Ref: VGP 2.2.10 VGP Fact Sheet 4.4.10	Keep reject water from coming into contact with contaminated materials, products or wastes. Discharge concentrated seawater where brine can be appropriately diluted by receiving water.
11. Elevator Pit Effluent Ref: VGP 2.2.11 VGP Fact Sheet 4.4.11	
12. Firemain Systems Ref: VGP 2.2.12 VGP Fact Sheet 4.4.12	Minimize discharges in shallow/contained water bodies (e.g., ports and protected waters). Use of firemain system allowable for washdown of anchor. Discharges prohibited in federal conservation waters.
13. Freshwater Layup Ref: VGP 2.2.13 VGP Fact Sheet 4.4.13	Minimize use of treatment chemicals to lowest effective level. Follow manufacturer effective treatment rates.
14. Gas Turbine Wash Water Ref: VGP 2.2.14 VGP Fact Sheet 4.4.14	Zero discharge standard. No oils or oily mixtures from gas turbine wash water may be discharged in harmful quantities. Prevent, where feasible, wash water from co-mingling with bilge water that is to be discharged. Treatment by oily water separator required, if cannot separately collect washwater.

DISCHARGE TYPE	STANDARD
15. Graywater Ref: VGP 2.2.15 VGP Fact Sheet 4.4.15	<p>Minimize the production and discharge of graywater in port.</p> <p>Utilize non-toxic, phosphate-free, biodegradable soaps as characterized by the Consumer Product Safety Commission in 16 CFR Chapter II, Subchapter C, Part 1500.</p> <p>Minimize kitchen oils to graywater system.</p> <p>Vessels greater than 400 GT that regularly leave Permit waters and have the capacity to store graywater may discharge greater than 1 nm from shore while vessel is underway.</p> <p>Vessels with the capacity to store graywater may not discharge in federal conservation areas.</p> <p>Vessels with no graywater storage must minimize discharges in federal conservation areas.</p> <p>If underway in nutrient impaired water (e.g., Chesapeake Bay, Puget Sound; see www.epa.gov/npdes/vessels), the vessel must:</p> <ul style="list-style-type: none"> • Not discharge graywater, if vessel has adequate graywater storage capacity; or • Minimize graywater discharge when vessel is underway, if no graywater storage capacity.
16. Motor Gasoline and Compensating Discharge Ref: VGP 2.2.16 VGP Fact Sheet 4.4.16	
17. Non-Oily Machinery Wastewater Ref: VGP 2.2.17 VGP Fact Sheet 4.4.17	<p>Discharge permitted if control measures are instituted to keep waste stream free of toxic and bioaccumulative oils and additives.</p> <p>Drain non-oily machinery wastewater into bilge.</p>
18. Refrigeration and Air Condensate Discharge Ref: VGP 2.2.18 VGP Fact Sheet 4.4.18	<p>Keep segregated from oily wastes and dispose of onshore or drain to bilge.</p>
19. Seawater Cooling Overboard Discharge Ref: VGP 2.2.19 VGP Fact Sheet 4.4.19	<p>Use Best Management Practices (BMP) to reduce discharges to ports and enclosed water bodies.</p> <p>Use shore based power when available and compatible with vessel.</p> <p>Remove fouling organisms from seawater piping and cooling systems regularly. Clean piping while at sea, not in regulated waters.</p>

DISCHARGE TYPE	STANDARD
<p>20. Seawater Piping Biofouling Prevention Ref: VGP 2.2.20 VGP Fact Sheet 4.4.20</p>	<p>Biofouling chemicals are prohibited from discharge, if banned for use in U.S.</p> <p>Use biofouling chemicals in accordance with FIFRA (40 CFR 152.15) label.</p> <p>Use minimum amount of biocide needed as determined by visual observations.</p> <p>Use organic biocides with short half-life. Periodically monitor total residual oxidant concentration, if oxidizing biocide utilized. Discharge must contain as little chlorine as possible.</p> <p>Remove fouling organisms on a regular basis and dispose of properly (with discharges at greater than 50 nm from shore and in accordance with all regulations).</p>
<p>21. Small Boat Engine Wet Exhaust (e.g., life boats, landing craft on board large vessels) Ref: VGP 2.2.21 VGP Fact Sheet 4.4.21</p>	<p>Maintain vessels that generate wet exhaust in good operating condition and in accordance with manufacturer's specifications.</p> <p>Use low sulfur or alternative fuels.</p> <p>Consider four-stroke engines in lieu of two-stroke engines.</p>
<p>22. Sonar Dome Discharge Ref: VGP 2.2.22 VGP Fact Sheet 4.4.22</p>	<p>Zero discharge standard. Avoid use of bioaccumulative biocides on sonar dome exterior, if viable alternatives exist.</p>
<p>23. Underwater Ship Husbandry Ref: VGP 2.2.23 VGP Fact Sheet 4.4.23</p>	<p>Conduct extensive hull repair and cleaning in drydock when feasible.</p> <p>For underwater repairs:</p> <p>Take all precautions to minimize the discharge of raw, toxic or oily materials.</p> <p>Use non-toxic anti-foulant paints (e.g., silicon based paints)</p> <p>For underwater cleaning:</p> <p>Employ removal and cleaning methods that reduce the environmental impacts of biocides, hull coating materials and invasive species.</p> <p>Use softest brush practicable in hull cleaning. Employ vacuum cleaning technologies, when available (this is a recommendation not a requirement).</p> <p>Minimize transport of aquatic nuisance species by using appropriate anti-foulant paint and frequently removing fouling organisms from hull.</p>

DISCHARGE TYPE	STANDARD
	<p>Copper-based anti-foulants:</p> <p>Hull of vessels that use copper-based anti-fouling paint may not be cleaned in copper impaired waters within the first 365 days after paint application, unless there is a significant visible indication of hull fouling.</p> <p>Visible cloud or plume of paint containing copper anti-foulant is a Permit violation.</p>
<p>24. Welldeck Discharges Ref: VGP 2.2.24 VGP Fact Sheet 4.4.24</p>	<p>Prohibited welldeck discharges are:</p> <p>Discharges from washdown of gas turbine engines.</p> <p>Discharges containing graywater from the smaller vessels, except in emergency.</p> <p>Garbage or wastes from equipment and vehicle washdowns must be free from garbage and must not contain oil in quantities that may be harmful.</p> <p>Onshore disposal required if effluent contains these wastes.</p>
<p>25. Graywater Mixed with Sewage Ref: VGP 2.2.25 VGP Fact Sheet 4.4.26</p>	<p>Graywater commingled with sewage must comply with the effluent limits for graywater. <i>(See additional vessel-specific requirements.)</i></p>
<p>Additional Requirements for Tankers</p>	
<p>26. Exhaust Gas Scrubber Wash Water Discharge Ref: VGP 5.5 VGP Fact Sheet 7.5</p>	<p>Zero discharge standard for sludge generated from exhaust gas scrubber washwater.</p> <p>Water discharge must not contain oil, including oily mixtures, in quantities that may be harmful.</p>
<p>27. Inert Gas System Ref: VGP 5.5 VGP Fact Sheet 7.5</p>	<p>For vessels equipped with an inert gas system (IGS), discharge of effluent is allowed from inert gas scrubbers.</p> <p>Minimize discharge from inert gas scrubbers, if feasible with design.</p> <p>Discharges of water from deck seals are authorized when seals are installed as an integral part of an IGS.</p>
<p>28. Scuppers Ref: VGP 5.5 VGP Fact Sheet 7.5</p>	<p>Operators of oil tankers must plug scuppers during cargo loading/unlading to prevent discharge.</p> <p>Clean oil spilled with oil absorbent cloths or another appropriate approach.</p>

PART II
SUMMARY OF STATE AND INDIAN TRIBE CONDITIONS OF CERTIFICATION TO THE VGP

This chart outlines the conditions individual states have imposed in certifying EPA’s VGP. In general, these state conditions are requirements that are in addition to or more stringent than those contained in EPA’s VGP. **The chart is a summary only and should not be utilized as a substitute for a reading of the actual requirements under VGP Part 6.** In addition, the document is intended for a compliance planning tool for Marshall Islands flag vessels. Only coastal and Great Lakes states are included in the chart. No inland waterways states are addressed. There are no Indian Tribe conditions that will impact Marshall Islands flag vessels as the listed tribal lands are located along rivers in the interior of the U.S. Finally, the chart attempts to capture the requirements with which vessel owners/operators will have to comply. It does not include general Permit or other conditions imposed by States (e.g., reserving rights to modify certification and standards or revoke Permits).

It is important to note that the VGP is effective in **every State** and Indian Country Land, except in **the Taos Pueblo Tribal Lands (New Mexico)**, where certification was denied.

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
California	Owner/operator must submit a certification stating that hazardous wastes as defined under California law, and prohibited wastes, will not be discharged. All applications, reports or information submitted must be signed and certified in accordance with specified requirements.	Discharges must be in accordance with the requirements of PRC section 72400 et seq. None of the 26 discharges covered by the VGP may contain hazardous waste as defined under California law, as well as listed hazardous substances. Prohibited from discharge are: sewage sludge, used or spent oil, garbage or trash (including plastic), photo-developing wastes, dry cleaning wastes, noxious liquid substance residues, and medical wastes. A discharge may not contain an oily sheen	Ballast water discharges must comply with PRC section 71200 et seq. and State Lands Commission (SLC) Ballast Water Performance Standards (CCR Sections 2270-2291).			Hull fouling control must comply with PRC section 71200 et seq. and SLC Ballast Water Performance Standards (CCR Sections 2270-2291). Propeller cleaning is allowed until 1 January 2012 . After this, cleaning shall be in accordance with SLC regulations to be adopted. All other in-water hull cleaning, including underwater ship husbandry discharges, is prohibited unless conducted using best available technologies (BAT) economically feasible, as determined by SLC and State Water Board.	The following additional California-specific reports must be submitted to EPA 1) SLC Marine Invasive Species Program Hull Husbandry Reporting Form (annually within 60 days of receiving a request from SLC); and 2) Ballast Water Reporting Form (upon departure from each port or place in State waters).

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
		<p>and oil and grease may not exceed 15 mg/l.</p> <p>The use of detergents to disperse hydrocarbon sheens in waste streams is prohibited.</p> <p>Methylene blue active substances should not exceed 0.5mg/L in all waterbodies.</p>					
Connecticut			<p>The VGP requirements are the minimum ballast water standards.</p> <p>Vessels with installed ballast water treatments system must treat ballast water to highest level afforded by that system prior to discharge in State waters</p>	<p>Upon issuance of VGP, graywater is prohibited from discharge, unless vessel is not equipped to hold such graywater for processing ashore or for discharge outside State waters.</p> <p>Effective 1 January 2012, discharges of graywater are prohibited from any vessel covered by VGP, regardless of vessel speed, unless discharge is granted an extension under limited circumstances. The request for an extension must be made by 30 June 2010.</p>			
Florida		<p>State water quality standards are stricter for oily mixtures and motor gasoline (VGP Parts 2.1.4 and 2.2.16.).</p> <p>Vessels must comply with State Rule 62-302-.530(5) for emulsified oils and greases, which must not exceed 5.0mg/L.</p>					

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
Georgia				Except for ocean going vessels of 20 tons displacement or more, the discharge of graywater shall be through a marine sanitation device that is in compliance with Federal standards.			
Guam		Discharges to coral spawning areas during coral mass spawning must be avoided.					
Hawaii	Commercial passenger vessels are required to meet specific State laws and requirements covering discharges from such vessels.	<p>Receiving waters of the State must be free of substances attributable to the discharges, including high or low temperatures; biocides, pathogenic organisms, toxic, radioactive, corrosive or other deleterious substances at harmful levels.</p> <p>Receiving waters must be free of substances attributable to the discharges, including floating debris, oil, grease, scum or other floating materials.</p> <p>An incidental discharge may not interfere with or become injurious to any assigned uses of State waters.</p> <p>Waste discharges into natural freshwater lakes, saline lakes and anchialine pools are prohibited. Waste means sewage, industrial and agricultural matter, and</p>	Ballast water discharges must also comply with Hawaii Administrative Rules (HAR), Chapter 13-76.				<p>An unlawful discharge under State or under the CWA Act must be reported to the Hawaii Department of Health and EPA within 24 hours, unless the VGP specifies another reporting period for that discharge.</p> <p>Enterococcus is added to the list of analytes for which samples must be taken under the VGP.</p> <p>Total residual chlorine in effluent discharges shall not exceed 13.0 ug/l in salt water or an acute concentration of 19.0 ug/l in fresh water.</p> <p>State waters affected by the applicable discharge activities are subject to monitoring and to standards for acute and chronic toxicity and the protection of human health as specified in HAR, Subsection 11-54-4(b).</p>

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
		all other liquid, gaseous, or solid substance, including radioactive substance whether treated or not, which may pollute or tend to pollute the waters of the State.					
Illinois		<p>Discharges of Bioaccumulative Chemicals of Concern must be in accordance with State requirements.</p> <p>State water quality standards may not be violated by any discharge.</p> <p>Effluents may not contain settleable solids, floating debris, visible oil, grease, scum, or sludge solids. Color, odor and turbidity must be reduced to below obvious levels.</p> <p>Discharges must be free from substances in concentrations toxic/harmful to human health, or to animal, plant or aquatic life.</p>	<p>Total residual chlorine is limited to 0.05 mg/l for discharges from ballast water treatment systems. Use of other biocides may not cause violation of applicable water quality standards.</p> <p>Ballast water that fails to meet State standards may not be discharged.</p> <p>With certain exceptions, discharges of ballast water in the Illinois portion of Lake Michigan must meet IMO certified treatment standards by: 1 January 2016 for vessels constructed prior to 1 January 2012; and prior to commencement of vessel operations for vessels constructed after 1 January 2012.</p>		Bilge water that fails to meet State standards may not be discharged.		
Indiana		Activities authorized under VGP may not violate State Water Quality Standards.	Discharges of ballast water in the Indiana portion of Lake Michigan must meet IMO certified treatment standards by 1 January 2016 for oceangoing vessels constructed prior to 1 January 2012 and prior to commencement of				Vessels are required to allow State, upon presentation of credentials, to enter and inspect, sample or monitor pollutant discharges and have access to and copy records.

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
			<p>vessel operations for vessels constructed after 1 January 2012.</p> <p>Analysis of organisms in IMO Ballast Water Treatment standards must be performed consistent with protocols currently being validated by the EPA Environmental Technology Verification Program or certain Great Ships Initiative protocols. If U.S. Government develops treatment standards more stringent than IMO, then those shall apply.</p> <p>Total residual chlorine is limited to 0.02 mg/l for discharges from ballast water treatment systems. Biocides may not be discharged in harmful or toxic concentrations.</p>				
Maine		No discharge of pollutants to Class GPA or class SA waters.		<p>Large Passenger Vessels are prohibited from discharging graywater or a mixture of graywater and blackwater, unless authorized through a State General Permit (SGP).</p> <p>Large Passenger Vessels are prohibited from discharging graywater into No Discharge Areas.</p> <p>Large Passenger Vessels must report to the State discharges of blackwater or graywater not</p>		No vessel may conduct hull cleaning, except as part of emergency hull repairs to secure the vessel or save a life at sea.	

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
Massachusetts		Discharge of TCE from all activities (not just drycleaning) is prohibited.	<p>Vessels engaged in coastwise trade on Atlantic or Gulf Coasts must meet VGP requirements for ballast water exchange of vessels on Pacific Nearshore voyages.</p> <p>Discharges from experimental ballast water treatment systems shall not contain more than 10 ug/l total residual chlorine.</p>	<p>authorized through the SGD, or discharges into No Discharge Areas.</p> <p>Vessels that have the capacity to store graywater may not discharge into Boston Harbor Islands National Recreation Area, the Cape Cod National Seashore and the Essex National Heritage Area.</p> <p>Discharge of untreated graywater for vessels of 400 gt is prohibited, regardless of speed. Treated graywater must meet VGP standards.</p> <p>Graywater commingled with sewage is prohibited from discharge in No Discharge Areas (¼ of State waters).</p> <p>For large and medium cruise ships and large ferries, the discharge of treated and untreated graywater is prohibited unless, the discharge meets State fecal coliform water quality standards of 14 fecal coliform cfu/100 ml with not more than 10% of samples exceeding 28 fecal coliform cfu per 100 ml.</p>		<p>Seawater biopiping prevention must meet chlorine discharge limit of 10 ug/l.</p> <p>No underwater hull cleaning except as part of emergency hull repairs. Such associated discharges, including removal of fouling organisms, are prohibited. Hull cleaning shall occur when vessel is in drydock or other landside facility.</p>	
Michigan		All vessels are prohibited from lowering the water quality of the State's Outstanding State	Oceangoing vessels are prohibited from discharging ballast unless vessel has obtained a certificate of Coverage under the Ballast	Discharges of blackwater and graywater are prohibited.			Vessels required to operate a ballast water treatment system are required to allow the State reasonable entry

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
		Resource Waters as listed or from causing or contributing to exceedances of the Marine Water Quality Standards.	<p>Water Control General Permit or an individual Permit from the State.</p> <p>Non-oceangoing vessels that operate experiment ballast water treatment systems are prohibited from discharging with a total residual chlorine concentration above 38 ug/l when the ballast water discharge duration exceeds 160 minutes or above 200 ug/l when the duration is less than or equal to 160 minutes. Non-oceangoing vessels are prohibited from discharging ballast water with a chlorine concentration above 13 ug/l.</p>				onto the vessel for inspection, access to records and collection of ballast water discharge samples.
Minnesota		State Permits for discharges must be obtained.	<p>A Permit is required for ballast water discharges. Discharges must meet applicable (i.e., IMO certified) treatment standards by 1 January 2016 for vessels constructed prior to 1 January 2012 and prior to commencement of vessel operation for vessels constructed after 1 January 2012.</p> <p>Vessels must comply with a ballast water and sediment management plan approved by the State and maintain a ballast record book meeting prescribed requirements.</p> <p>For vessels employing ballast water treatment</p>				

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
			systems, the maximum total residual chlorine limit is 0.038 mg/L.				
New Hampshire		All boat sewage discharge, whether treated or untreated, is prohibited in a No Discharge Area.					
New York			<p>With certain exceptions, vessels with voyages originating in the EEZ and entering State waters with ballast onboard must conduct ballast water exchange by the at least 50 nm from shore and in water at least 200 m deep. Vessels carrying residual amounts of ballast water and/or sediments must conduct saltwater flushing at least 50 nm from shore and in water at least 200 m deep.</p> <p>Ballast water exchange is defined as one empty and refill cycle of each ballast tank resulting in salinity of 30ppt or less or if impracticable, a sufficient number of flow-through exchanges to achieve 95% replacement of ballast water.</p> <p>Vessels must maintain the ability to measure salinity levels in each tank onboard to ensure salinities of 30 ppt.</p> <p>By 1 January 2012 all vessels, with limited exceptions, covered under a VGP must have a ballast</p>	Effective 1 January 2012 vessels may not discharge treated or untreated graywater, regardless of a vessel's speed. An extension request must be made by 30 June 2010 .	Effective 1 January 2012 vessels may not discharge treated or untreated bilge water, except for reasons of safety. An extension request must be made by 30 June 2010 .		

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
			<p>water treatment system that meets specific standards (more stringent than IMO standards) for the discharge of living organisms. An extension to this date may be granted for sufficient justification, but the request must be made by 30 June 2010.</p> <p>With certain exceptions, vessels constructed on or after 1 January 2013 must meet specific standards for the discharge of living organisms. These concentration-based standards, based on the California requirements, are more stringent than the ones for existing vessels. For example, a ballast water discharge may not contain any detectable living organism of 50 or more micrometers. An extension request must be made by 30 June 2011. The State intends to apply these standards for new construction to all ships beginning in the next certification period (in five years).</p>				
Ohio		<p>Discharge of organic quaternary ammonium compounds is prohibited.</p> <p>Discharges of any biocide or toxic chemical shall not be toxic to organisms in</p>	<p>Discharge of ballasted sea water within the breakwalls of the State's Lake Erie ports is prohibited.</p> <p>The State has certified IMO treatment standards. Discharges of ballast water for vessels that operate</p>				

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
		ambient waters, or rapidly lethal within the mixing zone.	<p>outside the Great Lakes must meet standards as follows: by 1 January 2016 for vessels launched prior to 1 January 2012 and prior to commencement of vessel operations for vessels launched after 1 January 2012.</p> <p>Analysis of organisms in IMO standards must be performed consistent with protocols currently being validated by the EPA Environmental Technology Verification Program or certain Great Ships Initiative protocols.</p> <p>For experimental and installed ballast water treatment systems, residual chlorine levels of 50 ug/l or less shall be judged in compliance with the State requirements, even though the State limits differ based on discharge time.</p> <p>Biocides other than chlorine must meet standard of “no rapidly lethal conditions” and inside-mixing zone water quality standards.</p> <p>If federal government adopts treatment standards more stringent than IMO, than those standards shall replace above treatment standards.</p>				

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
Pennsylvania	Discharges of floating materials, oil grease, scum foam, sheen and substances which produce color, taste turbidity or settle to form deposits in concentrations or amounts sufficient to be, or creating a danger of being, inimical to the water uses to protected or to human, animal, plant or aquatic life are prohibited.		<p>With certain exceptions, for vessels whose voyage originates from within the US EEZ, ballast water exchange must be conducted at least 50 nm from shore and in water of at least 200 m deep. Saltwater flushing at this distance and depth must be conducted for vessels carrying residual amounts of ballast water and/or sediments.</p> <p>The State's definition of ballast water exchange is the same as that of New York.</p> <p>All vessels must maintain a salinity level in each tank of at least 30 ppt.</p> <p>By 1 January 2016 all vessels covered under a VGP and constructed prior to 1 January 2012, shall have a ballast water treatment system that meets IMO-based standards as prescribed by the State. If compliance cannot be immediately achieved, an extension may be requested within six months of the issuance of the VGP.</p> <p>Vessels constructed after 1 January 2012 must have ballast water treatment systems that meet stricter standards (Same as New York standards for vessels</p>				

State	Applicability and Certifications	Discharges/ Effluent Limits	Ballast Water	Graywater	Bilge Water	Hull Coating Underwater Cleaning and Seawater Piping/ Biofouling Prevention	Monitoring, Inspection and Reporting
			constructed after 1 January 2013). If compliance cannot be immediately achieved, an extension may be requested within six months of the issuance of the VGP.				
Rhode Island		Nutrient Impaired waters are those referenced in the State's most current 303D list. A map identifying all State nutrient and biodiversity impaired waters must be included in all VGP.					